

South Dakota State University

Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Electronic Theses and Dissertations

1974

A Multi-Variate Analysis of Selected Socio-Demographic Factors Associated With the Attitudes of Big Stone Lake Area Residents Toward Community Services

Oscar J. Schinkel

Follow this and additional works at: <https://openprairie.sdstate.edu/etd>



Part of the [Rural Sociology Commons](#)

Recommended Citation

Schinkel, Oscar J., "A Multi-Variate Analysis of Selected Socio-Demographic Factors Associated With the Attitudes of Big Stone Lake Area Residents Toward Community Services" (1974). *Electronic Theses and Dissertations*. 5525.

<https://openprairie.sdstate.edu/etd/5525>

This Dissertation - Open Access is brought to you for free and open access by Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

A MULTI-VARIATE ANALYSIS OF SELECTED SOCIO-DEMOGRAPHIC
FACTORS ASSOCIATED WITH THE ATTITUDES OF BIG STONE LAKE
AREA RESIDENTS TOWARD COMMUNITY SERVICES

BY

OSCAR J. SCHINKEL

A Thesis Submitted
in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy, Major
in Sociology, South Dakota
State University
1974

A MULTI-VARIATE ANALYSIS OF SELECTED SOCIO-DEMOGRAPHIC
FACTORS ASSOCIATED WITH THE ATTITUDES OF BIG STONE LAKE
AREA RESIDENTS TOWARD COMMUNITY SERVICES

Abstract

OSCAR J. SCHINKEL

Under the supervision of Dr. Robert M. Dimit

A research project was conducted in the Big Stone Lake area. This area included Roberts and Grant Counties in South Dakota and the city of Ortonville in Minnesota.

In 1969 a 2800 acre tract of land was purchased near Big Stone City, South Dakota by a consortium of three electric power companies. A 450 megawatt plant will be constructed on the site. The completion date is projected for the summer of 1975. This planned industrial facility for a relatively rural area provided an opportunity to study the effects of rural industrialization. This phase of the total research project ascertained the area residents' attitudes toward the community services prior to the beginning of construction on the site.

A stratified random sampling procedure was used to select 179 heads of households. An interview schedule was used to ascertain personal, social, and economic characteristics of the respondents. A Likert-type summated rating scale was used to measure the respondents' attitudes toward the community services in the community with which they identify.

The objective of the study was to determine the attitudes of area residents toward community services, and the degree of association between a set of socio-demographic characteristics and attitudes toward community services.

A social systems theoretical framework was utilized as a basis for this study. A multi-variate stepwise regression technique was used to analyze the relationships between a set of selected independent variables (age, education, family size, length of residence, organizational participation, level of living, knowledge, religious affiliation, community identification, income, occupation, ownership of lakeside property, and magazine and newspaper subscriptions) and the dependent variable, attitudes toward community services.

In general, the residents of the area hold favorable attitudes toward the community with which they identify. Of the independent variables in the set, attitudes toward community services were significantly influenced by the consumption of mass media as measured by the number of magazines in the home, and the community with which they identify for Ortonville residents.

The general statistical hypothesis of no significant relationship between the set of independent variables and attitudes toward community services was not rejected. Two null sub-hypotheses, one relating to magazine subscriptions and the other to community identification (Ortonville) were rejected.

A MULTI-VARIATE ANALYSIS OF SELECTED SOCIO-DEMOGRAPHIC
FACTORS ASSOCIATED WITH THE ATTITUDES OF BIG STONE LAKE
AREA RESIDENTS TOWARD COMMUNITY SERVICES

This thesis is approved as a creditable and independent investigation by the candidate for the degree, Doctor of Philosophy, and is acceptable for meeting the thesis requirements for this degree. Acceptance of this thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Advisor

Date

Head, Rural Sociology Department

Date

ACKNOWLEDGEMENTS

Appreciation and pronounced gratitude is expressed to the following persons who have contributed much to the completion of this dissertation through their encouragement and assistance.

To Dr. Robert M. Dimit, Thesis Advisor, for his continued encouragement and professional assistance.

To Dr. James L. Satterlee, Head, Department of Rural Sociology, for his valued encouragements and recommendations.

To Dr. Marvin P. Riley for his careful scrutiny of the theoretical framework used in the dissertation.

To Professor Howard M. Sauer, for his valued advisements relative to the total doctoral program, and specifically to this dissertation.

To Dr. Howard A. Gilbert and Dr. Orville A. Schmieding, members of the advisory committee, for their encouragements and advice.

To Dr. Lee Tucker and Professor Orville E. Lanham for the direction and assistance in the statistical analyses.

To my family: my loving wife, Leah, and our three daughters, Evangeline, Jocelyn, and Carmen, for their continued encouragement, understanding, and patience.

OJS

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION TO THE STUDY AND STATEMENT OF THE PROBLEM	1
Introduction	1
Statement of the Problem	3
Justification for the Study	5
Objectives of the Study	10
II. THE THEORETICAL FRAMEWORK	11
Conceptualization of the Social System	11
The Community as a Social System	14
The Components of the Community	18
Social Bases of Attitudes	21
III. THE REVIEW OF LITERATURE	25
Introduction	25
Age	26
Education	27
Family Size	29
Length of Residence	33
Organizational Participation	34
Level of Living	36
Knowledge	37
Religious Affiliation	38
Community Identification	40
Income	43
Occupation	44
Ownership of Lakeside Property	46
Magazine and Newspaper Subscriptions	47
Summary and Statement of Hypotheses	48
IV. THE SETTING FOR THIS STUDY	51
Introduction	51
The History	51
Grant County, South Dakota	52
Big Stone City, South Dakota	53
Milbank, South Dakota	54
Roberts County, South Dakota	56
Ordnville, Minnesota	57
The Big Stone Lake Power Plant	58

Chapter	Page
V. RESEARCH DESIGN	60
<u>Introduction</u>	60
<u>Sampling</u>	60
<u>The Data Gathering Instrument</u>	61
<u>Definition of Terms</u>	62
<u>Data Collection</u>	63
<u>Statistical Technique</u>	64
VI. ANALYSIS OF DATA	65
<u>Introduction</u>	65
<u>Measurement of the Variables</u>	66
<u>Statistical Hypothesis</u>	70
<u>Level of Significance</u>	70
<u>Results of the Analysis</u>	70
VII. SUMMARY OF FINDINGS	72
<u>Characteristics of the Sample</u>	72
<u>Overview</u>	72
<u>Findings: Significant Relationships</u>	74
<u>Findings: Nonsignificant Relationships</u>	75
<u>Summary</u>	76
<u>Implications for Future Research</u>	77
REFERENCES	78
APPENDIX I - THE INTERVIEW SCHEDULE	89
APPENDIX II - TABLES	99

TABLES

Number		Page
1.	Attitude Toward Community Services and Expansion in Big Stone Lake Area	100
2.	Responses to Questions Comprising Knowledge Scale	101
3.	Number of Respondents Participating in Area Organizations	102
4.	Education Level of Respondents by Community of Residence	103
5.	Average Ages of Respondents by Community of Residence	104
6.	Distribution of Respondents by Community of Residence	105
7.	Average Length of Residence by Community of Residence	106
8.	Religious Affiliation of Big Stone Lake Area Residents by Community of Residence	107

CHAPTER ONE

INTRODUCTION TO THE STUDY AND STATEMENT OF THE PROBLEM

Introduction

Historically the economic base of rural communities has been farming and farm-related industries. In the twentieth century, and especially since World War II, changes in the social organization of rural communities have accelerated. Change, largely an urban phenomenon in the past, is very much part of the rural community today.

The rural communities have become closely interdependent with the total society. The technological and scientific changes in the larger society have had their impact on rural communities.

Out-migration from rural areas is occurring at a rate that has produced much concern. The economic attraction of urban communities is generally assumed as responsible for much of this migration. Modernization of farming equipment may be a "push" factor from within the rural communities. It has greatly increased individual worker productivity. The net result is large, but fewer, farms.

The attraction of rural residents to urban areas is enhanced by the conception of inadequate career opportunities in the rural communities from which they migrate. South Dakota is one of several states experiencing a relatively high out-migration with many who leave having the conception that the state has rather restricted career opportunities.

This out-migration has its negative consequences for the state's economy. The state has endeavored to minimize, or reverse, this loss of manpower. One such endeavor is the attempt to attract new industry. In a relatively rural state such as South Dakota this includes attempts to attract industry to rural areas.

The Big Stone Lake Area of South Dakota has been selected by a consortium of three electric power companies as the site of a power plant. The impact of such an industry, both during the construction phase and after it becomes operational, is expected to be significant. Limited research conducted on similar developments in other communities seems to indicate that industrialization of this kind, while spelling economic advantage, may have negative as well as positive results. It certainly means change for the community.

The Rural Sociology Department of South Dakota State University is conducting research on the Big Stone Lake area during this period of rural development. This dissertation involves an initial analysis of data obtained from Big Stone Lake area residents relative to their attitudes toward their community services. The data was collected using an interview schedule which was administered to a random sample of heads of households in the Big Stone Lake area prior to the construction of the power plant.

Two earlier research projects have been reviewed as a foundation for the development of this research project. These two projects, conducted by Summers, et al., (1969) in Putnam County,

Illinois, and Ploch and LeRay (1968) in Aroostook County, Maine, were conducted to assess social and economic consequences of rural industrialization. The Illinois study involved the construction of a major production complex and the Maine study involved the construction of a hydro-electric plant.

Statement of the Problem

People are unevenly distributed throughout the United States. The denser concentrations tend to be the bases of institutional services and employment for the nation. These densely populated areas have continued to draw persons from sparsely populated areas, producing further depletion.

Recently some industries have sought select sites in rural areas to locate their plants. One such site selected by an industry is located near Big Stone Lake in the northeastern part of South Dakota.

The location of an industrial plant in a relatively rural area, such as this part of South Dakota, is often accompanied by rapid and disorganizing change. These changes are due to a variety of factors, such as the investment of new capital, the in-migration of new workers and their families, new employment opportunities for local residents, and the demands for more services. The patterns of community life and employment are affected. New attitudes, values, and interaction patterns may result.

In the fall of 1969 three power companies acquired 2800 acres of land in Grant County, South Dakota, near Big Stone City.

This land was purchased as the site for an electric power plant which will be capable of producing 450 megawatts of electricity. Construction was scheduled to begin in 1972 and to be completed in 1975.

The plans for this power plant provided an opportunity for research on the impact of rural industrialization. An industry of the magnitude projected by the power consortium can significantly add to the county tax base. Tax rates in the county could be reduced because this new industry would pay a disproportionately high part of the taxes.

Industrialization of this sort may decrease unemployment. In-migration may be increased because of an increase in employment opportunities. This in turn may mean the need for additional services and service related industries. Of particular importance would be the adequacy of the educational, health care, police, fire, religious, and housing services in the community.

The overall problem of this study is couched in the preceding background information. The encompassing research project has been designed to gather data on the existing conditions and attitudes in the designated geographic area. It will also provide an informational and statistical base for follow-up research. This dissertation is limited to an analysis of the attitudes of area residents toward community services.

Research of this type is relatively rare. Very little is known regarding the change in values, attitudes, and patterns of behavior

when sudden community changes occur. This research project will provide data on a community prior to anticipated changes which the development of a major industry in a relatively rural area may bring. The data can serve as the base from which change can be assessed in the future.

Summarily stated, the problem is: What impact does a set of socio-demographic variables have upon attitudes toward community services under the conditions of proposed industrial development? A variety of socio-demographic variables will be utilized in the analysis. The dependent variable, attitude toward community services, has been operationalized by using the institutional approach in which the attitudes of area residents toward such institutions as schools, churches, hospitals, police departments, as well as water and sewage facilities, will be assessed. A Likert-type scale was used to measure such attitudes.

Justification for the Study

Change is a constant part of existence. Only the speed and the direction vary. Occasionally geographic changes can produce significant changes. However, more often migration to a new environment produces changes in social life. Changes in population size and/or composition always produce social changes.

When the social systems perspective is used to view a total society or smaller social networks, two processes can be recognized in operation: the process which tends to change the system, and the process which tends to maintain the system. These processes

are not mutually exclusive. In fact, they may be complementary and supportive of each other. By definition, the processes of change do produce change in the social system. However, they may also help to maintain it by enabling the social structure to keep its integrity as a differentiated system due to change.

(Johnson, 1960:625)

The social history of the United States is one of social and cultural change or development. Robin Williams (1970:625) has summarily enumerated the major changes of this century in descriptive generalizations as follows:

1. Urbanization.
2. Continuing and increasing geographic mobility of the population.
3. Industrialization, and the decline in agriculture as a proportion of the work force.
4. Mechanization, automation, cybernation.
5. Rising real per capita product.
6. Increase in life expectancy; control of communicable diseases.
7. Rising level of education; growth in scientific and technical knowledge.
8. Occupational specialization.
9. Increase in occupations dealing with services and in clerical, technical, and professional pursuits.
10. Spread of mass communication.

11. Specialization of family activities; decreased importance of kinship in the total social structure.
12. Specialization and secularization in religious organizations.
13. Decrease in ethnic, nationality, and religious cleavages; greater salience of ethnic-racial claims and conflicts.
14. Increase in universalism and equality in national economic and political sectors.
15. Growth in scope and activity in central polity.
16. Growth in scale and centralized direction of economic enterprises and related organizations.
17. Interpenetration of economic and governmental norms, exchanges, and relationships.

These generalizations denote a move of the total social system toward greater interdependence, centralization, and impersonality. As interdependence has increased, small communities have increasingly felt the impact of forces located outside the immediate geographic area. Some of these forces are: population migration, economic diversity, and political influences.

A concomitant development has been centralization. The growth in numerical size and socio-cultural complexity has also contributed to the development of more formal and rational relations. These in turn have produced more impersonal interaction.

Warren (1972:53) says the "great change" in community living has to do with greater orientation of the local community towards

systems outside the immediate community. These outside systems include the state and the nation. This interdependence with larger systems is very much in evidence in rural America. Rogers (1960:4-11) cites several trends and changes in rural societies which are in close affinity to such interdependence:

1. Americans today are "movers."
2. Farm people are decreasing in numbers.
3. Increasing numbers of persons are becoming part-time farmers.
4. Rural-nonfarm people are increasing rapidly in numbers.
5. Rural and urban values are becoming "rurbanized."
6. Widened horizons result from improved communications and transportation.
7. There are rural implications of growing industrialization.

All seven trends are relevant to this research. Number seven is of particular interest and concern. Industrialization has provided an economic pull for rural to urban migration. South Dakota is one of several states experiencing this kind of migration with the result of net loss in population. The potential increase in population for South Dakota during the 1960 to 1970 decade was 78,303 (Riley, Feb. 1971:22). The actual population decreased 14,257 during that same period of time. There is growing interest on the part of some individuals to stem, or reverse, this trend of net population loss. One of the goals of rural development involves an attempt to alter this trend through the attraction of industry to rural areas.

The planned construction of a 450 megawatt electric power plant by a consortium of three power companies near Big Stone Lake in South Dakota afforded an opportunity to study the effect of rural industrialization. The area under study for this project includes six townships in South Dakota, and the city of Ortonville, Minnesota. The townships in South Dakota are Alban and Big Stone in Grant County, and Geneseo, Lockwood, Becker, and Lake in Roberts County. Heads of households, randomly selected, were interviewed using a prepared schedule to measure attitudes toward community services and the proposed power plant. Research in this field is limited and the resultant data may have practical implications for the state as well as contributing to the sociological knowledge of changing rural America.

It is expected that the construction of this facility harbors change not only for the rural area surrounding the plant site but also for the three urban communities nearby, namely, Big Stone City and Milbank, South Dakota, and Ortonville, Minnesota. The data were gathered prior to the construction of the power plant. As the community experiences the influx of construction workers and their families, and later the out-migration of the same group coincidental with the in-migration of plant managers and operators, some significant social changes may occur in this geographic area. This "before" data will be very useful in assessing such change, for it provides a base line for such future comparative analyses.

Since research data is relatively scarce in this area, it is anticipated that this dissertation will contribute to the study of individual attitudes toward community in relatively rural areas. Industrial development in rural areas can leave both positive and negative effects. These effects can be assessed over time only when a base has been established which provides comparative data. This study provides such data.

Objectives of the Study

The basic and inclusive objective of this study is to provide data, and conduct an analysis of these data, to gain an understanding of a relatively rural community prior to industrial development. Specifically, the area under study is the environs of the power plant site.

This dissertation is limited to achieve the following objectives:

1. To assess the impact of a set of socio-demographic variables on attitudes toward community services.
2. To provide data which will serve as a base line from which change over time may be assessed in a given area.
3. To provide socio-demographic data on a relatively rural area in which industrialization is about to take place.
4. To make a contribution to sociological knowledge of rural communities undergoing social change.
5. To indicate possible areas for future research.

CHAPTER TWO

THE THEORETICAL FRAMEWORK

Conceptualization of the Social System

In this dissertation social theory is utilized as a basis for organizing the phenomena to be investigated. The general idea which pervades the conceptualization of many research problems is that of a collectivity as a social system with parts and properties that are interdependent (Riley, 1963:10). The social systems model will be used as a heuristic device to guide the formulation of the research problem in analyzing the relationship of select socio-demographic variables to attitudes toward community services.

The term "social system" was first used as a descriptive device relative to human society by Vilfredo Pareto (Abel, 1970:153). Pareto viewed society as composed of many interdependent elements. These elements determine the particular form of society. The main task of sociology, as he saw it, was to investigate the nature and property of social systems, and the changes they undergo. He concentrated his attention on the study of societal equilibrium.

Florian Znaniecki extended Pareto's conception of the social system. Pareto saw only the total society as a social system. Znaniecki (1934:12) insisted that social units of any size may be viewed as social systems. He established four classes of social systems to represent the whole field of sociology: social actions, social relations, social persons, and social groups. He saw the

task of sociology to be an accurate description of the systems, and the classification of them according to the elements belonging to them. After this description and classification is complete it should be possible to discover the laws that bind the elements together within the systems.

Talcott Parsons added to the social systems approach by proposing that a social system is made up of social actions of which the basic unit is status role. For him, social systems are not empirical givens but are constructed by actors in interaction with each other in concrete situations.

According to Parsons, status is determined by the orientation of others toward an actor. Status is thus the positional aspect in a relationship, while role is the active part of the relationship. Status implies rights, and roles imply obligations. The recognition of rights and obligations is, therefore, a basic condition for social system stability.

Social solidarity exists when a collectivity shares common value patterns, norms, and attitudes. Individual personal internalization of values, norms, and attitudes is the counterpart of institutionalization at the societal level.

While Parsons and his followers saw the systems approach was applicable to all levels of society, they made no major effort at community analysis using the systemic theoretical orientation. The application of social system analysis to community studies would seem to be appropriate.

A significant contribution has been made by Loomis and Beegle (1950:3-7) at this point. They suggest that social systems can be analyzed at two different levels. At one level, a social system may be seen as abstract, one in which the patterns of relationships continue from generation to generation and region to region. At this level social systems consist of patterns that continue to persist and do not require specific persons to be part of the system. At the second level, a social system may be seen as concrete in which you have cooperative social structures such as church congregations, schools, and hospitals. It can be shown that these organizations are comprised of persons who interact with members more than with nonmembers when functioning to achieve their objectives. They point out that the major components of this structure, value orientation, and locus of social systems include:

1. Roles, or that which is expected of individuals in given situations.
2. Status, or the ranking given individuals, based upon the consensus of members as to what traits and qualities are to be rated high or low.
3. Authority, or the right and power of individuals to influence others.
4. Rights, or the immunity from authority, and duties, or the required obedience to authority and the requirements associated with the individual's role.

5. Ends and objectives, or those changes which members of the system expect to accomplish through the operation of the system.
6. Norms, or the rules which govern the application of means in the accomplishment of the ends.
7. Territoriality, or the locus and space requirements of a social system.

The Community as a Social System

The components discussed above become more clear and realistic when they are applied to a specific social system. The Loomis and Beegle approach brings the social system concept to the concrete level and makes the social system model applicable to local community organizations and institutions, particularly when there is the additional emphasis on interaction of the member units. Such a system is operative and viable as long as the units remain in a systemic relationship. Loomis (1960:31,32) has called this systemic relationship "boundary maintenance," which he defines as "the process whereby the identity of the social system is preserved and the characteristic interaction pattern maintained." These boundaries may be physical, such as zoning restriction, or they may be social, such as variant life styles.

The major systems in a given community are linked to each other as well as to the systems outside the community. Systemic linkage, according to Loomis is "the process whereby one or more of the elements of at least two social systems is articulated in

such a manner that the two systems in some ways and on some occasions may be viewed as a single unit. Sanders (1966:181-183) states that there are at least five points at which systems are so joined as to appear to act as one, namely, in ideological commitment, personnel, program, finances, and combined linkages. By combined linkages he meant an interweaving of several of the previous four points.

Dobriner (1969:208) gives further credence to the theoretical assumption that human society is a system of mutually interrelated and functionally interdependent groups. This interdependentness and interrelatedness is shared analytically by society and community. The society is "an abstract concept of functional autonomy as a total system of relationships" (Dobriner, 1969:166), whereas the community approximates the empirical in that it can be observed in operation.

Sanders (1966:19) recommends that the sociological study of the community concentrate on the social relationships which are patterned into groups and larger social systems. In other words, research on the community should utilize the systemic approach.

Social relationships are not random expressions of human activity, but are part and parcel of the systemic arrangement of the social units in a given geographic area that we designate as the "community." The community is a social system. In fact, Inkeles (Sanders, 1966:19) defines sociology as the study of the

structures and the functioning of social systems, that is, relatively enduring systems of action shared by groups of people, large or small.

A feature in using the social system approach to community study is the focus on social relationships and interaction. This focus makes such matters as demographic, cultural, ecological, temporal, and personality factors a part of the total environment in which the community operates as a social system.

The community as a social system is part of complex environmental factors as well as being affected by them. Together these factors become the setting of the community system. Sanders (1966:25) schematically presented these "settings" as follows:

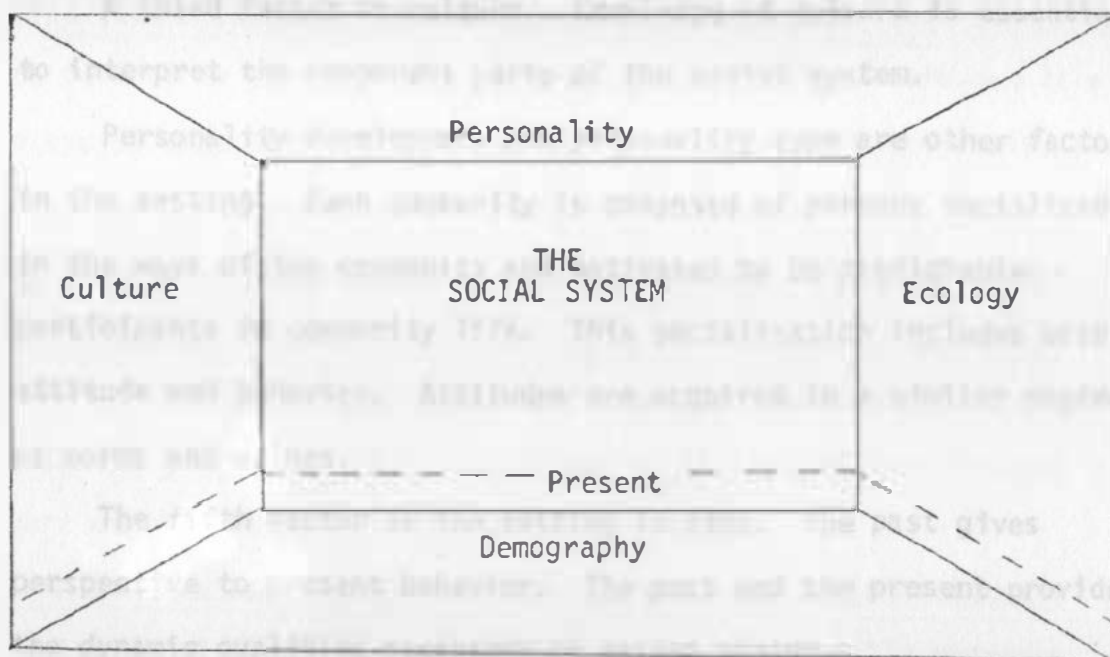


Illustration: The Setting of the Community System. (Source: Sanders, 1966:26).

*Time - past.

Any social system has some connection to the place where its members reside and function. A major factor, therefore, in the setting of the social system is ecology. For any community (social system) under investigation, it is necessary to examine how the people adjust to their natural resources, the climate, and the topographical features.

The demographic factor is also important in that a community is an aggregate of persons in all stages of the life cycle comprising diverse groups which have the technological skills and knowledge to sustain life. The community continues to experience dynamic changes in terms of numbers, age composition, and sex ratios of its constituents.

A third factor is culture. Knowledge of culture is essential to interpret the component parts of the social system.

Personality development and personality type are other factors in the setting. Each community is composed of persons socialized in the ways of the community and motivated to be predictable participants in community life. This socialization includes both attitude and behavior. Attitudes are acquired in a similar manner as norms and values.

The fifth factor in the setting is time. The past gives perspective to present behavior. The past and the present provide the dynamic qualities necessary to assess change.

These setting factors help the researcher to recognize the community as a social system which does not exist in a vacuum.

It is part of, and affected by, a number of environmental factors.

The Components of the Community

Any system has parts. In the case of a social system, the patterns of interaction are the parts. This means that a social system is dynamic and changing. However, it is possible to "freeze" a social system in time in order to analyze its structure. In this manner it is possible to note the components. In other words, the dynamic aspect may be stopped so that structure may be examined. These components are analytic concepts so the researcher may select the ones he wants to utilize.

The components of a community, as outlined by Sanders (1956: 31-37), will be briefly presented. These components are recognized as related to one another. In combination they are somewhat like a social map which may be consulted as a guide with the realization that any given point of concentration is related to all other parts of the map. The components, ranging from the individual to the major system follow.

1. The Individual: The individual is a social product and a social producer. He is socialized by the society and becomes part of the socialization process of others.

2. The Social Relationship: Some of the salient characteristics of groups and subsystems can be meaningfully examined from the social relationship perspective by noting the bonds between interacting persons. Each person in the relationship

has a status relative to the others. He acts according to the role expectations accompanying that status. Social attitudes and values affect the ranking of status, and social norms set the limits within which roles must be played.

3. The Social Group: The social group as a component of a social system may vary greatly in type and size, from informal cliques to formal organizations. It is in social groups that much of the time and energy of individuals is consumed. Largely through social groups things get accomplished or neglected. Community life is group life. A variety of studies (Selvin and Hagstrom 1963, Ryan 1952, Smith, et al., 1954, Dotson 1951, Bushee 1945, Komarovski 1946, Warner 1941, and Wright 1958) show that numerous aspects of group life are affected by the statuses that their members hold in the community. This means each group has a niche relative to other similar groups in the community, and the community constitutes part or all of the group's environment. The community as a social system is affected by what occurs in groups as well as by the type of interaction among groups within the community.

4. The Social Grouping: The social group concept is largely restricted to those in direct social contact. The term "social grouping" applies to those who have similar characteristics but do not interact on a face-to-face basis. Their similar characteristics allow these persons to be grouped in certain categories. When categories can be studied statistically it is possible to show the association between several of these groupings.

5. The Subsystem: Social groups tend to become tied together in interrelated social networks to satisfy various needs of man. These networks of social groups are designated as subsystems. It is useful to identify these subsystems in the larger society and then determine whether their local counterparts exist in the community.

6. Major Social Systems: The major social system component is a convenient way of grouping the subsystems together in functional contexts. For example, the professions, industry, agriculture, and banking may all be grouped together in the "economy." So when the economy is described references are made to the interrelationships of these subsystems. Each major system interacts with the other major systems, and each major system is made up of constituent subsystems which in turn have an impact on the welfare of the community.

Sanders (1966:36) states that cataloging the components of a community system provides a basis for classifying and describing most of the social units in the community. If a particular unit in the system is studied (such as an industrial plant) it is useful to realize it has constituent parts, and is a component of the larger unit. His conceptual scheme has been generated from social systems theory which provides the framework for this dissertation.

Some of the components discussed above are concrete and can actually be seen while others must be inferred from the behavior

of people and their groups. For example, it is impossible at one time or place to see an economy, however, one can see human behavior which is associated with a major system such as an economy, or it is possible to observe directly an individual, a social relationship, or a social group.

The conceptual model by Sanders affords the researcher an approach to data gathering and the searching for order among them. Sanders used this model in his analysis of the community as a system of social interaction. His application of the conceptual model in examining concrete community data leads him to abstract relevant facts from the full gamut of phenomena, and to report them in special ways. This model is useful in this research project by providing the framework in which attitudes toward community services can be examined as affected by a variety of socio-demographic variables.

Social Bases of Attitudes

In summary of the above section, one can state that a community is part of a larger system, the society. It is not a static system. It is influenced by what transpires outside its boundaries. The application of the "social system" concept implies movement and operation in which adjustment and change are part of life. That which transpires within its boundaries must also be taken into account. The community is made up of individuals, it is made by individuals, and may be remade and altered by individuals. Both the behavior and the attitudes of the individuals are involved in this process.

Rose (1965:17) defined attitudes as "tendencies to act." These tendencies to act are acquired in the socialization process. The socialization process is operative in the social environment. The tendencies to act, therefore, are the products of the social environment.

This dissertation utilizes attitudes toward community services as the dependent variable. Attitudes are responsive to changes in the relationships within an organization, and are affected by these relationships.

The individual encounters the culture at the local community level. It is at this level that he also encounters the society via its social systems. The individual's induction into societal systems and his acquisition of appropriate attitudes and behavior patterns are molded at the local community level. This "molding" equips the individual to become compatible with societal ways, to carry on those ways, and to develop them further.

Halloran (1967:29) states that a survey of research on attitudes indicates the main sources for them are:

1. Direct experience with the objects and situations,
2. Explicit and implicit learning from others, and
3. Personality development.

It is apparent that an analysis of attitude formation entails the socialization process with particular reference to child psychology and developmental psychology. The socialization process transforms the child into an adult as he learns societal attitudes and values.

Taking on appropriate attitudes toward other people, and environmental objects is basic to social existence. Hollander (1971:196,197) states that there are several functions of attitudes in fulfilling the individual's needs to achieve social identity and reality. The four functions he cites are as follows:

1. The instrumental, adjustive, or utilitarian function:

This function refers to the favorable responses an individual achieves from others by evidencing acceptable attitudes. In this light attitudes are rewarding because they yield social rewards.

2. The ego-defensive function: This function permits the individual to protect himself from acknowledging his deficiencies. For example, attitudes of prejudice help the individual to maintain his self-concept by continuing a sense of superiority over others.

3. The value-expressive function: This function allows the individual to openly express and acknowledge his commitments. The reward is experiencing confirmation of the positive aspects in his self concept.

4. The knowledge function: Knowledge represents the cognitive component of attitudes which gives direction to experience. Individuals desire a degree of predictability, consistency, and stability in their perception of the world.

Hollander says it must be understood that these functions are interrelated. A given attitude may accordingly serve several functions simultaneously. He suggests that psychological needs

motivate the adoption and maintenance of an attitude. This motivation base for attitudes is supportive of Rose's definition as "tendencies to act." These tendencies are acquired.

In this research project a set of several socio-demographic variables will be analyzed as to their relationship to attitudes toward community services. It has been shown that these attitudes are in large part formed within the major institutions of a community. It will be possible to assess the effect the independent variables have on these attitudes by utilizing the social systems framework.

This research project involves attitudinal research and analysis. It has been stated in the previous chapter that attitudes are socially learned in large part within one's community. Previous research showed the social basis of attitudes; the following review of literature will relate to certain socio-demographic variables which may be related to attitudes toward community services. This review will provide the certain areas which include hypothesis and concepts. The literature review is subdivided into the social systems framework which is referred to in the preceding chapter.

Lewis (1964:36-39) indicated that in his study of a coal mining community he found the members of this industry utilized a set of values and the morality for which they had an

CHAPTER THREE

THE REVIEW OF LITERATURE

Introduction

Even a cursory examination of the research literature relative to the community, attitude formation, and the impact of socio-demographic variables provides the basis for hypothesizing that a relationship exists between the previously mentioned variables and attitude toward community services. However, research which specifically focuses on such relationships is rare. Since this research project attempts to explicate such a relationship, the literature shedding some informational light in this area will be reviewed.

This research project involves attitudinal research and analysis. It has been stated in the previous chapter that attitudes are socially derived in large part within one's community. Having previously assessed the social bases of attitudes, the following review of literature will relate to certain socio-demographic variables which may be related to attitudes toward community services. This review will provide the context from which testable hypotheses can be derived. The literature utilized in establishing the social systems theoretical framework was also reviewed in the preceding chapter.

Lantz (1958:36-39) indicated that in his study of a coal mining community he found the development of this industry inflicted a type of change upon the community for which they had no

preparation. Some of these changes were the new industrial economy, industrial smoke, increased tempo of living, the work routine, and the black and immigrant groups which became symbolic of all the changes. It is not possible to precisely predict the changes which the Big Stone Lake area will experience because of all the related factors in the coming of the power plant. However, change certainly is anticipated.

Age

All societies recognize age as one of the bases for differentiation. Different roles are assigned to the different age groups. These assignments may vary from one time to another, or one place to another, within the society.

Some differentiation by age may be physiologically necessary. For example, elderly people and young children tend to be weaker than those in the intermediate years. Also, children, lacking knowledge, physical capability, and experience, may find some activities hazardous even though the same may be safe for adults.

Some differentiations are socially and culturally derived. For instance, cultures vary greatly in the age at which persons move from the status of a child to that of an adult. Age has important input in terms of these roles and relationships. It is a physical quality but primarily defined in social and cultural terms.

Lantz (1958:253) found that feelings of separation and isolation are especially existent among older persons. They feel that others do not relate well to them when they are old. Lasswell

(1965:416) indicates an age-education relationship. The older an adult at a given point in time, the fewer years of formal education he is likely to have completed.

Steeves (1969:224-232) contends that many references are made to the peaceful and contented farmer in contrast to the factory worker who feels alienated and dissatisfied with his lot. Steeves suggests a more adequate approach is to look at the degree of integration in each setting. Older workers are more dissatisfied than either young or middle-aged workers. This holds true whether they work on the farm or in the factory.

Fortney, et al., (1972:6) in a report on attitudes of farm operators in eastern South Dakota towards wetlands and waterfowl production, found that those below the age of forty tended to have the least favorable attitude toward wetlands, and those forty to fifty-five had the most favorable attitude. In other words, the Steeves and Fortney studies indicate a relationship of age to attitude.

The several sources above indicate an association between age and attitudes toward others, work, and environment. These are all decisive elements in the community system. Therefore, it is hypothesized that

There is a significant relationship between the age of the respondents and their attitudes toward community services.

Education

As culture has become more complex and extensive the learning process has also become more extensive relative to time, effort,

and attention. The teaching task has become more specialized. Persons are specifically trained for and perform certain tasks.

The aims of a school are expressed in the manifest functions of education cited by Lundberg, et al., (1968:416-417):

1. To inculcate the values and the social norms of the society,
2. To add to the cultural heritage,
3. To perpetuate the social heritage, and
4. To foster social solidarity.

To most Americans education means more than just socialization. It means varied possible exposure to, and ability to use, special techniques and knowledge which enable them to achieve life goals more easily. Lasswell (1965:403) states that education is one of the most important factors in determining the way an American will live. It enhances his chances to achieve many of his life's goals.

Several research reports indicate an association between education and other social and cultural variables. MacKinnon and Centers (1956:612-620) found that authoritarianism varied inversely with the amount of formal education completed. Steeves (1969:224-232) noted that as the number of years of formal education increases the degree of dissatisfaction with one's community decreases.

Sanders (1966:145) indicated that education is positively correlated to formal group memberships. Lasswell (1965:417)

cited a New York Herald-Tribune survey which found a positive relationship between the number of years of education completed and the number of visits to the dentists. He also indicated that the older an adult is at the present time, the fewer years of education he is likely to have completed. The number of years of education completed is also correlated with occupational level. Lasswell (1965:412) summarized some of the research findings related to attitudes, values, occupational status, and income status of the family. He found these are a cluster of inter-related factors which have a profound impact on the educational achievement of children.

Fortney, et al., (1972:6) found some variation in the amount of education and attitudes toward wetlands by South Dakota farm operators. Those with nine to twelve years of formal education were least favorable towards wetlands, while those with over twelve years of education were most favorable.

This perusal of literature citing formal education and its relationship to attitudes, or social and cultural variables which may influence attitude formation, suggests a basis for hypothesizing that

There is a significant relationship between the formal education of the respondents and attitudes toward community services.

Family Size

Such factors as social survival and general welfare are not ordinarily important determinants of individual attitudes and

behavior unless some of the more directly personal satisfactions are related to them. The family is mainly dependent on these direct personal satisfactions which are anticipated to derive from, and usually do derive from, intimate associations among members of the family. Lundberg (1968:295-299) indicated that among the several functions of the family are such things as the care and training of children, the provision of role models from the division of labor, and primary group satisfactions. In all three of these functions inter-societal variances are great. These functions may vary within a given society as well. This variation is dependent upon a variety of reasons, one of which is family size. It can readily be seen that the care and training of children may be quite different in amount and type in a family of ten compared to a family of four. A similar observation can be made in terms of role models for the attitudes, beliefs, and manners the children can assume as adults.

Children can provide, as well as receive, primary group experiences in the family relationship. These may be exhilarating and satisfying, or they may be trying experiences. Such primary group relationships also vary according to family size. Christensen and Johnson (1971:424) indicate that the more children there are in a family, and the closer they are to one another in age, the less intense and frequent is the parent-child interaction.

A basic sociological principle states that the size of an association affects its structure, and its members' behavior.

A similar statement can be made concerning the attitudes of members as well.

Blood (1972:389) states that increased numbers of children weaken the parent-child relationship and so reduce the parents ability to socialize them. In terms of social solidarity Loomis and Beegle (1950:70) contended that the size of the family is significantly a part of placing families on the solidarity versus antagonism continuum. The large families tended to be closer to the solidarity end of the continuum.

McKain and Whetten (1936:20-28) cite a study of Connecticut families in which there was a high correlation between family size and homogeneity as measured by the similarity of the spouses with reference to place of birth, national origin, age difference, religious affiliation, and educational status.

Blood (1972:391) cites a study by Douvan and Adelson in which they found that adolescents from small families felt closer to their parents, and identified more with them. They spent more of their leisure time with them, turned to them more often for advice, and used them more often as confidants. In larger families these signs of close parent-child relations were diminished or missing. Instead of relying on their parents, teenagers from larger families relied on their peers. Their attitudes toward their parents were a mixture of dependency and resentment. Result: lower aspiration and poorer attainment.

Many researchers have signified a relationship between family size and social class. Most assume the lower class family is

relatively large and mother-centered. Parsons (Anshen, 1959:251) indicates the mother is usually the psychological and economic center of the family and remains the security symbol for most members for the rest of their lives. Middle class families are more child-centered and matriarchal according to Lasswell (1965:287). Upper class families are patriarchal and father centered.

Bossard and Sanger (1952:3-9) found the larger the family the more authoritarian the power structure appears to be. The larger the family the more the group is emphasized over the individual, and the more important siblings become in personality development.

Bogue (1959:314) states that education is a major factor in fertility. He says it may or may not be associated with a structured and high plane of living. An inverse relationship exists between the number of children born and the number of years of education completed by the mother.

Hogan (1970:3) found the second reason (second to availability of jobs in the state) for young people staying in the state of South Dakota was family related, namely, that father, mother, siblings, etc., live there.

Summarily, the literature reviewed had no direct reference to family size and its relation to attitudes toward community. However, some relationships were cited between family size and social variables which impinge on attitude formation and/or attitude toward community. Some of these relationships were between family size and family relations, degree of socialization,

social class, education of parents, power structure, and familial solidarity. On this basis it is hypothesized that

There is a significant relationship between family size and attitudes toward community services.

Length of Residence

Americans are a nation of movers. In total numbers approximately twenty per cent change their place of residence every year. The research literature indicates a relationship between geographic mobility and alienation, anomie, and the decrease in strength of social pressures toward conformity. It may be inferred from these findings that residential stability may be associated with greater conformity and commitment to the community.

Rose (1967:423) states that it takes time to become a part of the community and have the opportunity to become involved in voluntary associations. These kinds of associations often give individuals a feeling of identification. The stranger is classless, as is the newcomer (Bierstedt, 1970:453).

Prestige is attached to duration of residence whether it be in a community, members on an athletic team, or students at a college. New members must abide by the norms more strictly than long-time members. The boundaries of tolerance are drawn more tightly for the rookie than for the older members who may be given more "rope" in experimenting with the norms or making recommendations for changes in them.

Community involvement signifies certain attitudes toward the community as shown by the literature reviewed. On this basis

it is hypothesized that

There is a significant relationship between length of residence in the community and attitudes toward community services.

Organizational Participation

Human beings are a social species. Each individual acquires his personality by participating in groups. It is natural for him to express the interests he has developed by continuing to participate in groups.

Gordon and Babchuk (1959:22-29) suggest that most groups and associations can be differentiated by the proportion of their activity which is "consummatory" (engaged in for its own sake or for pleasure) and the proportion that is "instrumental" (engaged in as a means to some future goal). These kinds of associations are referred to as voluntary associations because the individual has a choice to belong or not to belong.

Voluntary associations are an important part of most people's lives. Findings indicate that high rates of participation characterize the upper income groups, the more highly educated, and the residents of high status communities (Horton and Hunt, 1968:175).

Warner (1949:115) found in his study of Jonesville that there was less social club participation in the lower than in the upper classes. Service clubs were looked upon by many members as a means of gaining personal profit and prestige in the community. The Lynds (1956:285) found members of the business class in Muncie, Indiana, much more likely to belong to clubs and lodges than members of the working class.

Vidich and Bensman (1958:78) reported differential emphases given to several variables in life styles. Increasing emphasis was placed on social activities, particularly as they related to social class.

White (1955:150) found that church attendance and the use of community chest services were largely lower-lower class activities. Library use had a direct correlation with social class status. White concluded that there exists a correlation between particular social class membership and the choice of particular leisure time activities.

Sanders (1966:145) states that a general societal impression exists of a relationship between higher income and greater probability of membership in formal organizations as well as more active involvement in those organizations. Education was also shown by Sanders to be correlated with formal organization membership.

Fortney, et al., (1972:8) cited a correlation between attitudes toward wetlands and participation in wetlands programs. Copp (1965:8) found a general trend of more participation in community organizations over a period of time from 1937 to 1960. A sharp increase occurred in participation in activities outside the local community over the same period of time. Copp's study involved a rural Pennsylvania community which was surveyed at three different points in time, namely, 1937, 1949, and 1960.

Rose (1967:423) suggests that most organizations function cohesively for the society and minimize the disintegrating effects

of conflict. They provide a means of satisfying the interests of many citizens. Horton and Hunt (1968:174) noted that most of the welfare functions in modern society developed in voluntary organizations.

Olsen (1968:119) states that operationally organizations function as controlling agents in the socialization process of an individual. They are involved in forming and modifying the individual's attitudes.

The review of literature relative to organizational participation provides the bases for the hypothesis that

There is a significant relationship between participation in community organizations and attitudes toward community services.

Level of Living

Numerous research projects have utilized household possessions as a criterion to assess social class, levels of living, and stratification levels.

One of the earliest attempts to estimate social class based upon home furnishings was by J. Harold Williams, in "A Guide to the Grading of Homes," published in 1918. Chapin (1935:375) has developed a scale that has received voluminous usage. He used items found in the family living room as the scale items. He used the living room furnishings because the living room was the center of familial interaction. He felt this room was quite indicative of the socioeconomic status of the family.

The literature perused above has not directly provided information relative to a relationship between level of living and

attitudes toward community. It has shown that the level of living is correlated with other social and cultural characteristics that do reflect differential attitudes. Hence, it is hypothesized that

There is a significant relationship between level of living reflected by household possessions and attitudes toward community services.

Knowledge

Knowledge is often correlated with education. To most Americans education means much more than just socialization. It means access to special knowledge and techniques which will enable the person to achieve his goals in life more easily and enjoyably.

Gouldner (1970:493) states that knowledge is awareness, because it has no existence apart from the person's expression of it. It is an attribute of persons, and is influenced by the location of these persons within the social structure. A culture may assist or hinder in attaining awareness (knowledge). "Awareness involves a relationship between persons and information. It turns on the attitudes of persons toward information. It is related to persons' abilities to hold and use information" (Gouldner, 1970:494).

Gross (Lazarsfeld, 1967:304-310) states that the very fact an individual has an attitude toward something indicates he has some knowledge of it, or stated another way, a person's knowledge of something produces an attitude toward it. Any increase in knowledge about anything may modify the attitude toward it.

Based on the theory of knowledge reviewed above, it is hypothesized that

There is a significant relationship between knowledge of the power plant and attitudes toward community services.

Religious Affiliation

Much of what was earlier stated about organizational participation may also be stated about religious affiliation. Demerath (1969:28) cites Emile Durkheim as saying that the consequences of religion include group cohesion. The individual activity of believing and practicing religion is a response to demands of the group. Thus religion is social in origin. In fact, social cohesion is the source of religious sentiment.

Religious affiliation has been shown by several writers as related to other social and cultural variables. Bogue (1959:314) conducted a special tabulation of survey materials from the National Opinion Research Center. He computed the percentage of heads of households in each denomination who had more than a high school education, as well as the modal number of years of formal education in each denominational grouping. He found a correlation between religious affiliation and educational level. Protestants tended to have a higher education level than Catholics. However, Lutherans and Baptists tended to have lower levels than Catholics.

Both West (1945:130) and Gallaher (1961:214) reported that the churches in Plainville formed a social hierarchy. The Christian

Church was highest in the ranking, the Methodist Church was next, followed by the Baptist Church, and the Holiness Church of God was lowest. Gallaher pointed out that cultural and social class differences exist among the church memberships. This phenomenon is illustrated by the fact that Methodists, Christians, and Baptists attached the highest value to education, took the greatest interest in the local school, and provided the leadership in agricultural organizations, social organizations and other community affairs. Similar findings were reported by Hollingshead (1949:5490) in Elmtown and Warner (1949: Chapter 10) in Jonesville. Elmtown and Jonesville are pseudonyms for the same city, namely, Morris, Illinois.

Horton and Hunt (1968:175) similarly indicate that Protestants have a higher rate of participation in voluntary organizations than Catholics. Bierstedt (1970:455-456) also stated that nationally Congregationalists and Presbyterians rank higher than Methodists, who in turn rank higher than Baptists. He states it is doubtful if an Irish Catholic could ever be a "Proper Bostonian" even if he were a multimillionaire.

Kinneman (1947:298) suggests that organized religion exerts a major influence on the person. The church is referred to as a fellowship, and as such it is an agency for sharing aspirations, tastes, standards, and ideals.

The review of literature indicates that religion makes an impact on a person's way of life relative to aspirations, tastes, standards, and ideals. It is, therefore, hypothesized that

There is a significant relationship between religious affiliation and attitudes toward community services.

Community Identification

The section of this dissertation on the theoretical framework pointed out that interrelationships exist between local units and the larger society. These relationships tend to be quite strong. However, from the practical point of view, no local unit can continue to function for any length of time without taking into account its local relationships, regardless of how strongly it may be related to the larger society. In fact, the community system is based on local unit relationships.

Warren (1972:269) noted that it is possible to locate a structural interaction at the local level which displays the characteristics of a social system. In examining the relationship of local units to each other it can be seen that a great variety of specific units operate at the local level, such as churches, stores, individual self-employed professionals, business companies, fraternal organizations, and governmental bureaus. One aspect of this local structural interrelationship is geographic. There are two distinguishable areas to the geographic factor: the area which is served, and the area of local symbiotic dependence. These areas tend to coincide, although the area of service may sometimes be larger. For example, a museum may serve an entire region but its area of local dependence may be considerably smaller, constituting the area within which its employees live, and from which it receives its electricity, fuel, protection, etc.

Warren (1972:286-293) noted further a variety of ways in which the individual identifies with, and comes under the control of, the community system. They are summarized as follows:

1. Government: Local government exercises controls through ordinances regulating individual behavior.
2. Coordinating Units: The Chamber of Commerce, Board of Education, City Council, Council of Churches, and the Welfare Council are all examples of local organizations which exercise considerable power.
3. Civic Associations: Nonpartisan civic associations which emphasize such things as community development and improvement exercise influence through their special knowledge, access to power figures, and ability to conduct campaigns. While their influence may not be decisive directly, their presence is often an important factor in evaluating alternatives by such local units as labor unions, governmental offices, or business corporations.
4. Community Power Structure: This may be the most important instrument in bringing to bear local community considerations on specific community units. All community studies indicate the existence of concentrations of power in decision making. In this way the interests of the broad community can be brought to bear on any local unit.

5. Market Behavior: The individual "market" reaction of community people, as they appraise the local units, is a form of control. Individual decisions to buy or to work may be vital to the local unit.
6. Communications Media: The community press, radio, and television comprise a focus of control to which many local units are sensitive as they pursue their own goals. The flow of advertising from business establishments through the media further influences individuals toward their community.

These six factors are not exhaustive nor mutually exclusive. They do, however, point out the interdependence of local units and their reciprocal controls and influences. The literature reviewed thus far indicates that community identification is closely related to organizational participation.

Sewell and Orenstein (1965:155-163) studied a group of Wisconsin High School seniors and found a relationship between occupational selection and community size. They found a positive relationship between the choice of high status occupations and size of home community. They controlled for sex, intelligence, and socioeconomic status.

Vidich and Bensman (1960:20-23) saw indications in Springdale which reminded them of a large family grouping. The residents of Springdale tended to think alike.

The literature reviewed above, and the application of social systems theory, form the basis for the hypothesis that

There is a significant relationship between community identification and attitudes toward community services.

Income

Income is closely related to several of the variables reviewed in the literature above. Taylor (1964:426) states that the level of living of farm operators is directly associated with their income. Lasswell (1965:384) shows a positive correlation between median income and the years of formal education completed. Sanders (1966:145) declared that higher income is associated with a greater probability of membership in formal organizations, and a higher degree of participation in them.

Numerous authors have indicated that income or wealth, as difficult as they may be to define, appear commonly used as criteria in assessing social class placement.

Fortney, et al., (1972:6) did not find a high degree of variation when income was compared to attitude commitments in the study of South Dakota farm operators toward wetlands. Steeves (1969:224-232) found that income serves to reduce dissatisfactions with community regardless of the work context involved.

Very little reported research exists in the area of income and attitude development or change. The limited sources cited above do, however, provide a base from which to hypothesize that

There is a significant relationship between the family income of the respondents and their attitudes toward community services.

Occupation

For most persons a community is the place where they enter the labor force and continue to function in it. The larger and more complex the community, the greater the division of labor, or differentiation of jobs. Emile Durkheim developed the concept "Division of Labor." He stated that in societies with minimal division of labor a solidarity exists which comes from a single set of values and human patterns. With greater division of labor comes greater interdependence of the parts. The people are held together, not so much by a single set of values, as by their mutual interdependence in the whole system.

Some tasks in a social system carry more prestige and are taken over by those in the upper statuses who have greater power. Other tasks which are considered "inferior" are left to be performed by those having the least advantages.

As an individual enters the labor force, the quality of his work, his satisfaction with the work, and his social mobility up and down the occupational ladder become important to the community. Nelson, et al., (1960:212) states that they have a basis, from community structure research, to generalize that "appropriate occupational choice influences an individual's relationship to the community, but this may be influenced by many nonrational factors." They also point out (153) that occupation is not naturally a ranked variable, but it is ranked only as the other dimensions influence the classification. Alba Edwards (Nelson,

et al., 1960:153) developed one of the most useful classifications based on income, the amount of skill required, and the amount of education held by members of each occupation.

Lasswell (1965:447-451) indicates some of the concomitants of occupation:

1. Mortality Rates: As the occupational status classification decreases the death rate increases.
2. Birth Rates: As occupational status classification decreases the birth rate increases. Occupation appears to be more closely related to birth rates than income.
3. Residential Area: There is a relationship between occupation and residential area.
4. Suicides: There is a relationship between occupation and suicide rates. Suicide rates are high for professional and unskilled personnel, and lower for those in between.
5. Mate Selection: Persons tend to marry into occupational levels near their own.
6. Leisure Time: When the North-Hatt continuum is divided into four categories of occupations leisure time activities for those thus categorized are different. The highest category of persons most frequently attend plays, concerts, lectures, play bridge, and do community service work, while those in the lowest category most frequently watch television, fish, play poker, go driving, and attend baseball games.

7. Educational and Occupational Aspirations: The higher the occupation of the parents, the more likely the students will have high educational and occupational aspirations.

The literature reviewed above indicated a relationship between occupation and commitment to community. It is, therefore, hypothesized that

There is a significant relationship between the occupations of the respondents and their attitudes toward community services.

Ownership of Lakeside Property

This variable is more unique to this particular study than any of the others discussed above. Very little research is available on property ownership and its relationship to attitude formation and/or development. The same literature can be cited here as was reviewed in the discussion of level of living. The ownership of lakeside property on Big Stone Lake involves a considerable financial investment. This in and of itself serves as a basis of selectivity. It has already been indicated that the higher the social class the more likely the person is to have access to scarce consumption goods. Thorstein Veblen (Coser and Rosenberg, 1969:393) called this "conspicuous consumption."

Several researchers have attempted to assess social class level according to types of homes and their location. When the neighborhoods and dwelling areas were also taken into account this variable was a satisfactory variable in the assessment of social class placement.

In the review of literature above it has been shown that a relationship exists between level of living and several other socio-demographic variables. It is, therefore, hypothesized that

There is a significant relationship between ownership of lakeside property by the respondents and attitude toward community services.

Magazine and Newspaper Subscriptions

It is assumed that a subscription to a printed medium is followed by at least partial consumption of it. Based on this assumption one can cite a relationship between this variable and the knowledge variable. Writers generally agree that there are differences in the consumption of mass media material.

The Lynds (1956:240) noted that some types of periodicals were subscribed to exclusively by the business and professional class while others were exclusively subscribed to by the working class. Hodges (1964:161,162) concludes from his study of Peninsula People that reading is largely a white collar pastime. The higher one's class level the more books and magazines he reads. He also noted different patterns of television viewing by social class placement. The higher the social class the fewer number of minutes per day one spends in television viewing.

Hollingshead (1949:308) found Elmtowners' book borrowing practices were class related. Lasswell (1965:240) mentions a study conducted in Sandusky, Ohio, in which only seven per cent of the highest socioeconomic group did not read magazines, while thirty-five per cent of the lowest group did not. Eighty-two

per cent of those in the lowest social class grouping read one book or less per month while only fifty-nine per cent of those in the highest social class had the same record. Lasswell (1965:240) referred to another study of women readers in which the most prosperous tended to read "Time" magazine instead of "True Confession," while the opposite pattern held true for the economically disadvantaged.

It is generally understood that mass media are an influential part of the socialization process in our society. Much of what is learned involves the printed page. The impact of written communication on the development of attitudes is apparent. Even though literature is not available that cites the relationship of the printed page to attitudes toward community, it is substantiated that differential reading patterns exist, and mass media are a significant part of the socialization process within which attitudes are formed. It is, therefore, hypothesized that

There is a significant relationship between the number of magazine and newspaper subscriptions owned by the respondents and their attitudes toward community services.

Summary and Statement of Hypotheses

The preceding review of literature has provided that reservoir out of which a set of variables have been extracted to become the independent variables in this research project. Their relationship to the dependent variable, attitudes toward community services, will be assessed in the following study of Big Stone Lake area residents.

The review of literature has, in most instances, provided a direct basis for testable hypotheses. In some cases, such as family size, previous research relating this variable with attitudes toward community was nonexistent. However, research was cited which substantiated a relationship of the variable to other variables that impinge on attitude formation. Therefore, by inference bases for the additional hypotheses were signified.

This research project will be guided by the following hypotheses:

General Hypothesis:

There is a significant relationship between the selected set of socio-demographic variables and attitudes toward community services.

Sub-hypotheses:

1. There is a significant relationship between the age of the respondents and attitudes toward community services.
2. There is a significant relationship between the years of formal education completed by the respondents and attitudes toward community services.
3. There is a significant relationship between family size and attitudes toward community services.
4. There is a significant relationship between length of residence in the community and attitudes toward community services.

5. There is a significant relationship between participation in community organizations and attitudes toward community services:

6. There is a significant relationship between level of living and attitudes toward community services.

7. There is a significant relationship between level of knowledge and attitudes toward community services.

8. There is a significant relationship between religious affiliation and attitudes toward community services.

9. There is a significant relationship between community identification and attitudes toward community services.

10. There is a significant relationship between income and attitudes toward community services.

11. There is a significant relationship between occupation and attitudes toward community services.

12. There is a significant relationship between ownership of lakeside property and attitudes toward community services.

13. There is a significant relationship between the number of magazine and newspaper subscriptions and attitudes toward community services.

CHAPTER FOUR

THE SETTING FOR THIS STUDY

Introduction

Any community does not exist in isolation. It is part of, and influenced by, a variety of complex factors which unitedly can be designated as its setting. The setting factors for a social system approach to community study have been presented in chapter two.

A brief description of the area under investigation will be presented in this section. The theoretical and conceptual materials presented thus far have aided in the development of an organizing image of the phenomenon under investigation. The theoretical and conceptual framework provides the questions to be asked at the empirical level. Below is the description of the community setting in which answers to the research questions will be sought.

The History

The geographic area which becomes the locale for this research surrounds the southern tip of Big Stone Lake. Big Stone Lake comprises part of the border between Minnesota and South Dakota. The topography is characterized by numerous hills and valleys, as well as flat river valley land. Agriculture is the principal industry of the area.

The area under investigation falls within the bounds of three counties, namely, Roberts and Grant in South Dakota, and Big Stone

in Minnesota. Only the segments of these counties immediately adjacent to the power plant site were sampled for the study. This included Alban and Big Stone Townships in Grant County, Geneseo, Lockwood, Becker, and Lake Townships in Roberts County, and the city of Ortonville, Minnesota. A brief history of the three counties and the major urban communities within them is presented below to give a time and place perspective in the setting.

Grant County, South Dakota

Black (1939:20) states that Dakota Territory was born March, 1861, in one of the last acts of President Buchanan. One of the first acts of President Lincoln was to appoint the first governor of the territory. He appointed one of his close friends, Dr. William Jayne, of Springfield, Illinois, to the post. The new governor provided for the territory to be divided into counties. What is now Grant County was part of Red River County which extended along the east side of Dakota Territory from the Canadian border all the way south to the junction of the Sioux and Missouri Rivers. This made the county approximately 450 miles long.

As settlers moved into Red River County it was subdivided and what is now Grant County was made part of Deuel County. Deuel County included parts of what are now Hamlin, Codington, and Roberts Counties. It was not until 1873 that Grant County was formed. It was reduced to its present size in 1883.

The railroad was one of the greatest influences on development in the pioneer days. In 1878 the Milwaukee Railroad reached

as far west as Ortonville. In 1880 it was extended west to the townsite of Milbank, South Dakota, which was located in a wheat field owned by Henrietta Baxter.

The first settlers in Grant County arrived in 1850. However, the rush for land came when the railroad announced its decision for an extension west of Ortonville. In 1878 the county seat was established at Inkpa City, which later became Big Stone City.

Inkpa City was the first village to develop west of Ortonville. The first three school districts were organized in 1879. In 1881 the county was organized into townships and ten road districts were developed in the county.

Big Stone City, South Dakota

The site of the town now called Big Stone City was earlier known as the Indian village, Inkpa City. Numerous excavations by these early inhabitants are still in evidence along the hillsides. Big Stone Lake was a favorite resort for the various Indians of the surrounding region. The town was platted in 1879 although a Post Office had been established there in 1875.

Big Stone City includes three distinct town sites, namely, Inkpa City, Geneva, and Big Stone City. During 1879 and 1880 many building projects were undertaken. The village continued to grow steadily. It never experienced any great boom period as did its rival neighbor, Milbank, but its growth was significant. The first county seat was established at Big Stone City. Through

much intercommunity rivalry, and a very close vote, Milbank became the county seat in 1883.

The population of Big Stone City was 631 in 1970 (Riley and Wagner, 1971:43). This was a 12.1 per cent net loss in population from 1960. It has no major industry within the city limits although there are several granite quarries in the vicinity. Agriculture is the major industry of the area.

Religious organizations had an early start in the area. The first services were conducted in Big Stone City. The local group which later became the Big Stone City Evangelical Church (now United Methodist) had its beginnings in the 1870's. The first building was constructed in 1881. Next came the Roman Catholics who also built a church that same year. The only protestant church remaining in the community at the present time is the former Evangelical Church, although the Methodist Episcopal, German Methodist, German Baptist, and Presbyterian Churches organized congregations at one time.

Milbank, South Dakota

Milbank was platted in August, 1880, and immediately became a boom town. Some settlers had moved to the area in 1877 and 1878. The first building constructed on the town site was a lumber office. In approximately one month there were fifty buildings of various sorts.

In three months Milbank claimed 300 residents and became the service center for the county. It grew so rapidly that the

residents voted for incorporation in 1881. In one year's time the population had grown to 700. For a number of years Milbank was the "outfitting station" for many settlers moving still farther west.

Many areas in Dakota Territory engaged in competition and manipulation in order to have the county offices located within their city. The fight between Big Stone City and Milbank may be one of the most notable. In September, 1881, the citizens of Milbank adopted a resolution to strive to have the county seat moved from Big Stone City. Their argument was based on centrality of location in terms of service to county residents. The county seat provided trade advantages, so Big Stone City was determined to keep it. The county commissioners allowed a request that a vote be taken on relocation.

On the November election day both towns sought to get every possible vote into the ballot boxes. The result did not give Milbank the two-thirds required to permit the move. When the commissioners met to canvass the vote two ballot boxes were missing. Milbank decided to forcefully get the county records. They were able to get some of them. For a short time there were two county seats in operation. Finally, the District Court declared Milbank the county seat in February, 1883.

In 1880 Milbank voted to establish its first public school. School started in December of that year with 75 students enrolled.

The first religious group to build a church in Milbank was the Methodists. They constructed their first building in 1882. The Catholics had organized a congregation in 1881. The Congregationalists built a church in 1884.

Milbank is the largest city in the county. Its population in 1970 was 3,727, an increase of 6.5 per cent over the 1960 figure. It has several sizable industries within its limits. Milbank Mutual Life Insurance Company employs approximately 200 persons. Valley Queen Cheese Factory has total sales of approximately 3.3 million dollars annually and employs 75 persons. The major industry of the immediate area is Agriculture.

Roberts County, South Dakota

Roberts County is located in the extreme northeast corner of South Dakota, on the western bank of Lake Traverse and Big Stone Lake. Sisseton, a city of 3,094 in 1970, is the county seat.

In March, 1883, Roberts County was created by an act of the Dakota Territorial Legislature. Traverse was originally selected as the county seat. This selection caused a feud between Traverse and Wilmot. However, when the Sisseton-Wahpeton Indian Reservation was established in 1892, Sisseton began to grow and compete for the county seat. In 1898 Sisseton rather forcibly claimed the county seat even though they had not received the required two-thirds of the votes to do so legally.

Grant County is an important agricultural area of South Dakota claiming some of the most productive land in the State. The county has three state parks, two state operated recreational areas, and three roadside parks. In 1966 field crops made up 36 per cent of the total cash farm income in the county (Potas, 1968:34).

Ortonville, Minnesota

Ortonville was first laid out by its proprietor C. K. Orton, in 1872 (Neil, 1882:975). He was satisfied that it was a good place for a town site although there was no one living there at the time. By 1878, there were only about a dozen buildings in the place. In April, 1879, a fire wiped out almost all of the village. All the destroyed buildings were replaced during that summer.

Krier (1949:13) states that the winter of 1880-1881 was a very severe one with blizzards, heavy snow, and extreme cold. The railroad was snowbound for 126 days. Supplies of all kinds were used up. Piles of railroad ties, intended for extension of the railroad tracks, were used for fuel.

Wulff (1959:16-22) states that the first school was held in the basement of a grocery store. The first school house was built in 1876. By 1882 this building was outgrown and a two-story, two-room building was constructed.

The first religious services were held by an Episcopal minister from Minneapolis in 1874. The Episcopal Church was organized in

1879. The Congregationalists and Methodists also organized congregations that same year. The first Catholic Mass was celebrated in a private home that same year. Catholics attended the church in Big Stone City until 1904 when they built their own in Ortonville. Other congregations organized before the turn of the century were the Swedish Methodist Church, the Swedish Zion Lutheran Church, and Trinity German Lutheran Church. Several other congregations, such as First English Lutheran Church and the Christian Science Church, were established in the 1900's.

Ortonville's population in 1970 was 2,816 which was a 5.3 increase over the 1960 figure.

The Big Stone Lake Power Plant

The construction of the Big Stone Lake Power Plant was scheduled to begin early in 1972, with the projected completion date of May, 1975. It will be fueled by a soft lignite coal having a low sulphur content. This coal is mined in North Dakota.

During the construction phase the work force will number between 400 and 500 men. Once the plant comes into operation the permanent staff will number approximately fifty. Most of these persons will be technical and professional personnel from outside the Big Stone Lake area.

The Bechtel Corporation has contracted to design and construct the facility. Bechtel Corporation (1970) has assured the states of South Dakota and Minnesota that no water contamination will occur. The plant's electrical generators will be cooled with

water pumped from nearby Big Stone Lake and stored in a manmade lake by the plant. The water used to cool the generators will be vaporized by means of cooling towers. The vapor from the cooling towers will contain fly ash and several other mineral residues.

The major part of the work force for the construction will be recruited from the tri-state area. This crew of skilled, semi-skilled, and unskilled workers will comprise approximately 92 per cent of the total work force. The remaining eight per cent will be from the permanent Bechtel Corporation staff of technical and administrative personnel.

The electricity produced by this plant will be consumed mainly by metropolitan areas east of the State of Minnesota. Once the plant is in operation it is expected to consume five 100-car trainloads of coal per week, and 150,000 gallons of water per minute. The plan includes a cooling pond to recycle the water with a net loss through evaporation of approximately 480 gallons per minute. The water for cooling will either be drawn from Big Stone Lake, as stated above, or from a reservoir to be constructed on the Whetstone River nearby.

CHAPTER FIVE

RESEARCH DESIGN

Introduction

This dissertation shall report the research involved in assessing the empirical relationship between several selected socio-demographic variables and attitudes toward community which have been operationalized by focusing on community services. This is a "still picture" of attitudes in the fall of 1970. The data presented will, however, provide a base from which subsequent analyses can assess social change.

Sampling

The sample was selected on the basis of five per cent of the urban population and twenty per cent of the rural population. Several pertinent factors, such as population sizes and representativeness, were taken into account in establishing the method of sampling. The sampling method adopted was to draw: a fixed per cent simple random sample of the two communities, Milbank and Ortonville, a 20 per cent simple random sample of the Big Stone City residents, and a 20 per cent stratified random sample of the rural area. Big Stone City did not qualify for city status by census definition, so a 20 per cent sample of electrical and water consumers in the community was selected. The rural area was stratified on the basis of farm size. This sampling procedure netted 179 heads of households as interviewees.

Several possibilities were reviewed to ascertain the most accurate sampling frame possible. It was concluded that the Ottertail Power Company listing of electrical consumers in Milbank, and the city clerk's listing of electrical and water users in Ortonville would be the most accurate and conclusive for the urban communities. The rural areas were sampled using a stratified random sample based on farm size. The data for this sampling were procured from the Agricultural Stabilization and Conservation Service offices in the respective counties.

The Data Gathering Instrument

The interview schedule was prepared in two parts. The first part was developed to gather personal, factual, and descriptive data related to the respondent, his family, his property, his community involvement, and his knowledge of the area. The second part included several Likert-type, five alternative, scales to ascertain the respondents' attitudes related to several institutional considerations in the area. This study will utilize the scale assessing attitudes toward community services.

A survey of literature on attitude formation, community research, and social systems theory disclosed the possible significant influence of some socio-demographic variables upon a person's attitude toward community services. Selected socio-demographic variables from part one of the interview schedule will be used as independent variables in analysis of their relationship to the dependent variable, attitude toward community services.

Definition of Terms

The terms used in this study are operationalized as follows:

Community: In keeping with the social systems theoretical framework of this study Warren's (1972:9) definition is used, which states that "a community is that combination of social units and systems which perform the major social functions having local relevance."

Attitude: Irving Sarnoff's (Halloran, 1967:26) definition will be used in this study and is as follows: Attitude is "a disposition to react favorably or unfavorably to a class of objects."

Respondent: The ascertained head of the household who was interviewed for this study.

Age: The chronological age indicated by the respondent.

Education: The total number of years of formal schooling completed by the respondent.

Family Size: The total number of members in the sole nuclear family unit of the respondent.

Length of Residence: The total number of years the respondent has lived in the current residence.

Organizational Participation: The total number of community organizations in which the respondent participates.

Level of Living: The total number of household facilities such as central heating, air conditioning, etc., in the homes of the respondent.

Knowledge: The level of knowledge exemplified by the respondents in ten substantive areas related to the Big Stone Power Plant.

Religious Affiliation: The denominational affiliation indicated by the respondent.

Community Identification: The community indicated by the respondent as the one with which he mainly identifies.

Income: The total gross income of the family unit of which the respondent is a part.

Occupation: The classification of the respondent's occupation on a ten category scheme.

Ownership of Lakeside Property: The indication by the respondent that he does or does not own property on the lakeshore of Big Stone Lake.

Magazine and Newspaper Subscription: The total number of magazine and newspaper subscriptions by the family unit of which the respondent is the head.

Data Collection

Prior to the administration of the interview schedule to the selected sample in the Big Stone Lake area it was pretested on a sample drawn from outside the geographic area under study. On the basis of the results of this pretest, refinements were made in the measuring instrument.

The permanent data for this study were gathered by an interview team of five South Dakota State University graduate assistants in the Rural Sociology Department and five area residents in the fall of 1970.

A three-day training program was conducted with the interviewers. This program included practice interviews using the schedule with nonsample respondents. Interviewers were then assigned to specific sub-areas within the total area. Each completed schedule was examined by the coordinator of the study to insure completeness and consistency.

Statistical Technique

The independent variables in this study are as follows:

- A. Age
- B. Education
- C. Family Size
- D. Length of Residence
- E. Organizational Participation
- F. Level of Living
- G. Knowledge
- H. Religious Affiliation
- I. Community Identification
- J. Income
- K. Occupation
- L. Ownership of Lakeside Property
- M. Magazine and Newspaper Subscriptions.

The dependent variable is attitudes toward community services.

To predict a single dependent variable from the selected number of independent variables a least squares multivariate statistical analysis was utilized.

CHAPTER SIX

ANALYSIS OF DATA

Introduction

A five-point Likert-type scale was used to measure attitudes toward community services as a continuous dependent variable.

The attitudes of the respondents were weighted as follows:

SA	MA	U	MD	SD
Strongly	Mildly	Undecided	Mildly	Strongly
Agree	Agree		Disagree	Disagree
1	2	3	4	5

A thirteen variable set of independent variables was used in a least squares multivariate analysis. This technique provided a rank order arrangement of the independent variables and their association with the dependent variable, attitudes toward community services. The independent variables' (X_{1-13}) relationship to the dependent variable (Y) can be stated in functional terms as follows:

$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13})$, in which:

Y = Attitudes toward community services as a function of the following independent variables in a set relationship:

X_1 = Age

X_2 = Education

X_3 = Family Size

X_4 = Length of Residence

X_5 = Organizational Participation

X_6 = Level of Living

X_7 = Knowledge

X_8 = Religious Affiliation

X_9 = Community Identification

X_{10} = Income

X_{11} = Occupation

X_{12} = Ownership of Lakeside Property

X_{13} = Magazine and Newspaper Subscriptions.

The theoretical least squares equation is written in the following form:

$$Y = (a + b_1X_1, b_2X_2, b_3X_3, \dots, b_kX_k)$$

in which

Y = Attitudes toward community services.

a = Y intercept.

b - Regression Coefficient.

$X_1 \dots X_k$ = Variable Set.

Measurement of the Variables

Y = Attitude toward Community Services:

A five-point Likert-type unidimensional scale was used to measure this variable. There were eleven scale items relating to community services in the area under study. Included among the questions, or statements, were items regarding the respondents' attitudes toward expansion of the community services.

The scale items (included in Scale C, Appendix I) are as follows:

I feel the community will have to expand to accommodate the new people when the plant is being built.

I feel that we now have enough hospital facilities to serve the additional people.

I feel our police department is presently large enough to serve the additional people.

I feel our fire department is large enough to absorb the anticipated increase.

I feel our present supply of drinking water will be sufficient.

I feel our present sewage facilities are sufficient enough to service the new people.

I feel expansion of our churches will be necessary.

I feel our school facilities will have to be expanded.

I feel many additional apartments and houses will have to be built.

I feel after the construction force leaves, we will have a surplus in the above service areas.

I feel if we have a surplus of facilities, it will hurt the area.

Ideally an item-analysis should correlate scale items with some reliable criteria outside of the attitudes being measured, and then only the items are used which have the highest correlations. In this study, as is true in most, such external criteria were not available. The alternative was to accept a carefully constructed pool of items as the best available measure of attitudes toward community services. This latter alternative was selected out of necessity. The respondents selected from a Strongly Agree to a Strongly Disagree response continuum. A cumulative score was assigned each respondent on the basis of his responses to the eleven items. Low scores indicated a positive attitude toward

community services. The possible range of scores for individuals was from 11 to 55. The average for the sample was 37.3.

X_1 = Age: An interval scale of chronological age was used to measure this variable. The respondent was asked to give his age as of the last birthday.

X_2 = Education: The respondent was asked to indicate the number of years of formal education he had completed. The measurement of this variable was an interval scale.

X_3 = Family Size: This variable was measured by asking the respondent to indicate the number of persons in the family unit.

X_4 = Length of Residence: This variable was measured by asking the respondent how long he had lived at the present residence. The total number of years was recorded.

X_5 = Organizational Participation: This variable was measured by asking the respondent to indicate the organizations in which he held membership. The total number was counted and recorded.

X_6 = Level of Living: This variable was measured by asking the respondent to indicate his ownership (or lack of ownership) of thirteen household facilities. This dichotomous scale had a potential range of ten to twenty.

X_7 = Knowledge: A dichotomous scale with a possible range from 10 to 20 points was used. Respondents were asked to indicate their knowledge in 10 substantive areas.

X_8 = Religious Affiliation: Each respondent was asked to indicate his denominational affiliation. The denominational affiliation was identified by an assigned number.

X_9 = Community Identification: This variable was classified similarly to religious affiliation. The respondent indicated the community with which he primarily identified. Each community was assigned a number.

X_{10} = Income: An interval scale was used to measure this variable. The respondent indicated total family income in one of nine income categories ranging from less than \$2,500 to over \$15,000 per annum.

X_{11} = Occupation: The respondent was asked to identify his occupation. This response was categorized on a ten point modified Edwards scale, with an assumed ordinal ranking between occupational groups.

X_{12} = Ownership of Lakeside Property: This variable was measured by a dichotomous scale. The respondent was asked if he did, or did not, own property on Big Stone Lake.

X_{13} = Magazine and Newspaper Subscriptions: This variable was measured by asking the respondent which magazines and newspapers the family receives by subscription. These were counted and the total number was recorded.

Several of the above variables are such that they cannot be numerically measured. They can, however, be classified by the assignment of an identification number. These variables are

known as dummy variables. A dummy variable is a variable which cannot be measured numerically and so is classified by the assignment of identification numbers. In this set of independent variables community identification and religious affiliation are of this type. The dummy variable approach allows the introduction of information into the regression analysis which is not measured on a numerical scale.

Statistical Hypothesis

The statistical hypothesis used in this analysis is:

There is no significant relationship between the selected set of variables and attitudes toward community services.

Level of Significance

Blalock (1960:125) suggests a general guide in the selection of a significance level. This is to "lean over backwards to prove oneself wrong or obtain results that one actually does not want to obtain." This usually entails the use of a null hypothesis which the researcher subjects to test. A commonly selected level of significance in the social sciences is the .05 level. This level will be used in this study.

Results of the Analysis

It was perceived in the review of literature that possible significant relationships existed between the thirteen independent variables selected for this study and the dependent variable. In the analysis, a stepwise process was used through which the regression sum of squares was reduced.

The set of independent variables dealt with above contained several subsets. In the computer analysis the variables comprising each subset were introduced into the equation as individual variables. Because of their affinity these variables were treated as sets in the review of literature and methodology. The stepwise analysis, however, contains eighteen variables due to the subdivision of the following:

Family size was divided into the number of male children and female children.

Subscriptions were placed in two classifications; magazines, and newspapers.

Community Identification was treated in three classifications; identification with Big Stone City, identification with Milbank, and identification with Ortonville.

Religious Affiliation was classified in two broad classifications; Catholic and Protestant.

The eighteen variables in the regression analysis yielded an overall R^2 value of .149. The iterative process identified two variables as being significant at the .05 level, with an R^2 value of .070.

CHAPTER SEVEN

SUMMARY OF FINDINGS

Characteristics of the Sample

An analysis was conducted to ascertain certain pertinent characteristics of the sample. Forty one and one-half per cent of the respondents completed eight or less years of school, and 32.8 per cent completed twelfth grade (Table 4, Appendix II). The average number of years of formal education completed by the respondents was 10.4. The average age of the respondents was 53.5 years (Table 5, Appendix II).

The average length of residence in the community was 21.9 years (Table 7, Appendix II). Rural area respondents had resided longer in their communities, on the average than did urban respondents. The major segment (87 per cent) of the respondents perceived their area as fair or good in terms of economic conditions. Urban respondents perceived the economic conditions of the area as good or excellent more often than did rural respondents.

Overview

The eighteen variables were ranked through the stepwise process of multiple regression analysis in the following order by degree of association to the dependent variable (from high to low):

Magazine Subscriptions,

Community Identification: Ortonville,

Income,

Knowledge,
 Community Identification: Big Stone City,
 Number of Male Children,
 Community Identification: Milbank,
 Education,
 Ownership of Lakeside Property,
 Religious Affiliation: Protestant,
 Religious Affiliation: Catholic,
 Length of Residence,
 Number of Female Children,
 Level of Living,
 Age,
 Organizational Participation,
 Occupation, and
 Newspaper Subscriptions.

The R^2 for the complete eighteen variable set was .149.

Through the iterative process the number of variables significant at the .05 level was found to be two: Magazine Subscriptions, and Community Identification: Ortonville. The other variables were not significant at the selected level. The general statistical hypothesis that

"There is no significant relationship between the selected set of variables and attitudes toward community services"

cannot be rejected. The inclusive sum of squares reduced (.149) was not sufficient at the .05 level of significance. First and

second ranked sub-hypotheses related to magazine subscriptions and community identification (Ortonville) can be rejected. The sub-hypotheses concerning the remainder of the variables cannot be rejected.

The regression prediction equation with an R^2 value of .070 through the stepwise process can be written in the following form:

$$\hat{Y} = 35.85025 + -.95349 (X_1) + 2.52561 (X_2).$$

Findings of Significant Relationships

Findings will be presented in the rank order each variable appeared in the stepwise process. The first two have been found significantly related to attitudes toward community services.

Magazine Subscriptions: This variable represents the number of subscriptions received in the home of the respondent. The negative association was significant at the .05 level. Therefore it can be concluded that there is a significant relation between the number of magazine subscriptions and attitudes toward community services. The null hypothesis relating this variable and the dependent variable can be rejected.

The review of literature cited a relationship between the consumption of the printed page and such variables as socio-economic status, and knowledge. The significant association indicates the more magazines there are in the homes by subscription, the less favorable is the attitude toward community services. However, the results of this study do not show a significant

relationship between subscriptions to newspapers and such variables as socio-economic status and knowledge.

Community Identification: Ortonville

The independent variable in second position on the basis of associational strength with the dependent variable is identification with the city of Ortonville. This association was significant at the .05 level. Therefore, the null hypothesis is rejected and it is concluded that a significant relationship exists between community identification (Ortonville) and attitudes toward community services.

In the review of literature and the social systems theoretical framework it was cited that a relationship develops between particular community which is "home" and attitudes toward community. These findings substantiated the earlier results.

It must be recognized that this association was significant in predictive power only for Ortonville. The Big Stone City and Milbank community identification variables were not significant. However, in the ranking of the eighteen variables they ranked fifth and seventh, respectively. In an additional analysis of these data Ortonville ranked first in its predictive power for environmental attitude scores. Warren (1972:286-293) was cited in the review of literature as stating a number of ways in which the individual identifies with, and comes under the control of, the community. The results of this study corroborate an association

of that type. (See Tables 6 and 7, Appendix II, re. Community of Residence and Length of Residence.)

Findings of Nonsignificant Relationships

The remaining sixteen independent variables did not significantly (.05) reduce the total sum of squares. The null hypotheses for these variables are therefore not rejected and no statistically supported conclusions can be drawn from the results.

Summary

In viewing the total array of independent variables as they were arranged through the stepwise program in the multiple regression analysis the results indicate that the residents of the Big Stone Lake area tend to hold favorable attitudes toward community services.

The social systems theoretical model was an integral part of this study. It is perhaps the most pervading model used in sociology.

Attitudes toward community services were significantly influenced by the consumption of mass media, via magazines, and community identification (for Ortonville residents). Level of knowledge, extension of awareness, and wider societal exposure are but a few products of the consumption of the printed page. These have a significant influence on how an individual views his community.

The community with which an individual identifies will influence attitudes toward the community services. This was

shown by the Ortonville residents. While Big Stone City and Milbank residents did not register significance in the relationship of community identification and attitudes toward community services at the .05 level, they did rank fifth and seventh in the total array of variables.

Implications for Future Research

Two of the eighteen independent variables significantly reduced the total sum of squares at the selected .05 level of significance. In future research refinements of the measuring instrument, a sharpening of the variables, and a different sample may very well result in several of the nonsignificant variables in this study being significant.

This study provides a base line assessment of attitudes toward community services. Future studies, particularly as they relate to the construction and operation of the Big Stone Lake Power Plant, can be compared to it in order to measure change.

The Big Stone Lake area of South Dakota will experience change with the establishment of this major industry. Very little research on change of this type in a relatively rural area has been performed. Future study of this area relative to social change and rural development would contribute to an area of sociological research that needs expansion.

REFERENCES

- Abel, Theodore
1970 The Foundation of Sociological Theory. New York: Random House.
- Aberdeen American News
1955 News Clipping about Milbank. Aberdeen, South Dakota: Aberdeen American News. August 11.
- Anshen, Nanda
1959 The Family: Its Function and Destiny. New York: Harper and Brothers
- Antonides, Robert J.
1966 Some Guidelines for Organizing Economic Development Efforts in South Dakota Along Trade Area Lines. Cooperative Extension Service Bulletin 651. Brookings: South Dakota State University.
- Arensberg, Conrad A.
1954 "The Community Study Method." American Journal of Sociology 60 (September):109-124.
- Arensberg, Conrad A., and Solon T. Kimball
1965 Culture and Community. New York: Harcourt, Brace, and World.
- Arensberg, Conrad A., and Solon T. Kimball
1968 "Community Study: Retrospect and Prospect." American Journal of Sociology 73 (May):691-705.
- Bauman, Karl E.
1968 "Status Inconsistency, Satisfaction in Social Interaction, and Community Satisfaction in an Area of Rapid Growth." Social Forces 47(September):45-52.
- Bernard, Jessie
1962 American Community Behavior. New York: Holt, Rinehart, and Winston.
- Bernard, Jessie
1973 The Sociology of Community. Glenview, Illinois: Scott, Foresman, and Company.

Bechtel Corporation

1971 Engineering Report for Governmental Regulatory Agencies of Big Stone Plant. San Francisco: The Bechtel Corporation.

Bierstedt, Robert

1970 The Social Order. New York: McGraw-Hill Book Company.

Black, Doris Louise

1939 History of Grant County, South Dakota, Milbank: Milbank Herald Advance.

Blalock, Hubert M.

1960 Social Statistics. New York: McGraw-Hill Book Company.

Blood, Robert O.

1972 The Family. New York: The Free Press.

Bogue, Donald J.

1959 The Population of the United States. Glencoe: The Free Press.

Bossard, James H. S., and Winogene Sarger

1952 "The Large Family System." American Sociological Review .17 (February):3-9.

Bushee, Frederick A.

1945 "Social Organization in a Small City." American Journal of Sociology 60 (November):217-226.

Copp, James H.

1965 Three Decades of Change in a Stable Rural Community. University Park, Pennsylvania: Pennsylvania State University Agricultural Experiment Station Bulletin 261.

Chapin, F. Stewart

1935 Contemporary Social Institutions. New York: Harper and Brothers.

Christensen, Harold T., and Kathryn P. Johnson

1971 Marriage and the Family. New York: The Ronald Press.

Clark, Terry N.

1968 Community Structure and Decision Making. Scranton: Chandler Publishing Company.

Coser, Lewis A., and Bernard Rosenberg, Editors

1969 Sociological Theory. New York: The Macmillan Company.

Demerath, N. J., and Phillip A. Hammond

1969 Religion in Social Context. New York: Random House.

Di Renzo, Gordon J.

1966 "Concepts, Theories, and Explanation in the Behavioral Sciences" in Talcott Parsons and Charles Ackerman's, The Concept of a Social System as a Theoretical Device. New York: Random House.

Dobriner, William M.

1969 Social Structures and Systems. Pacific Palisades: Goodyear Publishing Company.

Dotson, Floyd

1951 "Patterns of Voluntary Associations among Urban Working Class Families." American Sociological Review 16 (October):687-693.

Economic and Social Survey of Grant County

1937 Economic and Social Survey of Grant County, South Dakota. Brookings: State Planning Board, Central Office.

Etzioni, Amitai, and Eva Etzioni

1964 Social Change. New York: Basic Books.

Field, Donald R., and Robert M. Dimit

1970 Population Change in South Dakota Small Towns and Cities, Brookings: South Dakota State University Agricultural Experiment Station, Bulletin 571.

Flynn, William L.

1970 "Influence of Community Values on Innovations." American Journal of Sociology 75 (May):983-991.

Fortney, Charles T., Robert M. Dimit, and Donald R. Field, and Howard M. Saver.

1972 Attitudes of South Dakota Farm Operators Toward Waterfowl Production. Brookings: South Dakota State University Agricultural Experiment Station, Bulletin 592.

Gadda, H. W., and James Pollman

1969 South Dakota Agricultural Occupational Opportunities and Training Needs. Brookings: South Dakota State University Agricultural Experiment Station. Bulletin 553.

Gallaher, Art

1961 Plainville Fifteen Years Later. New York: Columbia University Press.

Gouldner, Alvin W.

1970 The Coming Crisis of Western Sociology. New York: Basic Books.

Haber, Audrey, and Richard Runyon

1973 General Statistics. Reading: Addison-Wesley Publishing Company.

Halloran, J. D.

1967 Attitude Formation and Change. Leicester: Leicester University Press.

Halparn, Joel M.

1967 The Changing Village Community. Amherst: University of Massachusetts Press.

Hammond, Kenneth R., and James R. Householder

1962 Introduction to the Statistical Method. New York: Alfred A. Knopf.

Hertzler, J. O.

1946 Social Institutions. Lincoln: University of Nebraska Press.

Hertzler, J. O.

1954 Society in Action. New York: The Dryden Press.

Hiller, E. T.

1941 "The Community as a Social Group." American Sociological Review 6 (April):189-197.

Hogan, Edward Patrick

The Dilemma of South Dakota Youth. Brookings: South Dakota State University and the United States Department of Agriculture. FS 494.

Hodges, Harold M.

1964 Social Stratification. Cambridge: Schenkman Publishing Company.

Hollander, Edwin P., and R. G. Hunt, Editors

1963 Current Perspectives in Social Psychology. New York: Oxford University Press.

Hollander, Edwin P.

1971 Principles and Methods of Social Psychology. New York: Oxford University Press.

Hollingshead, August B.

1949 *Elmtown's Youth*. New York: John Wiley and Sons.

Homans, George C.

1950 *The Human Group*. New York: Harcourt, Brace, and World.

Horton, Paul B., and Chester L. Hunt

1968 *Sociology*. New York: McGraw-Hill Book Company.

Inkeles, Alex

1959 "Toward an Interaction Conception of Society." *Social Forces* 38 (October):9-18.

Johnson, Harry M.

1960 *Sociology: A Systematic Introduction*. New York: Harcourt, Brace, and World.

Kaufman, Harold

1959 "Personality and Social Structure" in *Sociology Today*, by Robert K. Merton et al. New York: Basic Books.

Kinneman, John A.

1947 *The Community*. New York: Appleton-Century-Crofts.

Komarovsky, Mirra

1946 "The Voluntary Associations of Urban Dwellers." *American Sociological Review* 11 (December):686-698.

Krier, Vera Woodward

1949 *Scwing the Seeds*. Ortonville: The Ortonville Independent.

Lantz, Herman R.

1959 *People of Coal Town*. New York: Columbia University Press.

Lasswell, Thomas E.

1965 *Class and Stratum*. New York: Houghton-Mifflin.

Lazarsfeld, Paul F., and Allen H. Burton

1955 "Some Cultural Principles of Questionnaire Classification" in Lazarsfeld and Rosenberg, *The Language of Social Research*. New York: The Free Press.

Lazarsfeld, Paul F., et al.

1967 *The Uses of Sociology*. New York: Basic Books.

Leslie, Gerald R.

1973 The Family in Social Context. New York: Oxford University Press.

Levy, Marion J.

1966 Modernization and the Social Structure. Princeton: Princeton University Press.

Loomis, Charles P., and J. Allen Beegle

1950 Rural Social Systems. New York: Prentice-Hall.

Loomis, Charles P.

1960 Social Systems: Essays on their Persistence and Change. Princeton: D. Van Nostrand and Company.

Lundberg, George A., et al.

1968 Sociology. New York: Harper and Row.

Lynd, Robert S., and Helen M. Lynd

1956 Middletown: The Study in Modern Culture. New York: Harcourt, Brace, and World.

MacIver, Robert M.

1931 Society, Its Structure and Change. New York: Richard Lang and Richard R. Smith, Inc.

Mackinnon, William J., and Richard Centers

1956 "Authoritarianism and Urban Stratification." American Journal of Sociology 61 (May):612-620.

McKain, Walter C., and N. L. Whelton

1936 "Size of Family in Relation to Homogeneity of Parental Traits." Rural Sociology 1 (March):20-28.

Merton, Robert K.

1957 Social Theory and Social Structure. New York: The Free Press.

Merton, Robert K.

1968 Social Theory and Social Structure. New York: The Free Press.

Milbank Herald Advance

1955 News Item about Milbank. Milbank: Milbank Herald Advance, August 4.

Morrison, Denton E.

1970 Farmers' Organizations and Movements. East Lansing: Michigan State University Agricultural Experiment Station. Bulletin 24.

- Neil, Edward D.
1882 History of Minnesota Valley. Minneapolis: North Star Publishing Company.
- Nelson, Lowry, Charles E. Ramsey, and Coolie Verner
1960 Community Structure and Change. New York: The Macmillan Company.
- Perry, Bradford G.
1972 A Study of Selected Factors Associated with Environmental Attitudes. Brookings: South Dakota State University. Unpublished Ph.D. Dissertation.
- Phillips, Bernard S.
1971 Social Research. New York: The Macmillan Company.
- Ploch, Louis A., and Nelson L. LeRoy
1968 Social and Economic Consequences of the Dickey-Lincoln School Hydro-Electric Power Development. Orono, Maine: Maine Agricultural Experiment Station.
- Olsen, Marvin
1968 The Process of Social Change. New York: Holt, Rinehart, and Winston.
- Potas, Roy
1968 Roberts County Agriculture. Pierre: South Dakota Crop and Livestock Reporting Service.
- Reeder, William W., and Nelson L. LeRoy
1970 Farm Families Under Stress. Ithaca: Cornell University Agricultural Experiment Station.
- Riley, Marvin P.
1965 Where Native South Dakotans Lived in 1960. Brookings: South Dakota State University Agricultural Experiment Station. Bulletin 528.
- Riley, Marvin P., and Robert T. Wagner
1971 Population Change of Cities and Incorporated Places in South Dakota 1950-1970. Brookings: South Dakota State University Agricultural Experiment Station. Bulletin 586.
- Riley, Marvin P., and Robert T. Wagner
1971 South Dakota Population and Net Migration 1960-1970. Brookings: South Dakota State University Agricultural Experiment Station. Bulletin 580.

- Riley, Marvin P., Bruce G. Breamer, and Eugene T. Butler
 1972 South Dakota Population Age and Sex Structure 1960-1970.
 Brookings: South Dakota State University Agricultural
 Experiment Station. Bulletin 599.
- Riley, Matilda White
 1963 Sociological Research. New York: Harcourt, Brace, and
 World.
- Rogers, Everett M.
 1960 Social Change in Rural Society. New York: Appleton-
 Century-Crofts.
- Rose, Arnold M., Editor
 1962 Human Behavior and Social Processes. Boston: Houghton
 Mifflin.
- Rose, Arnold H.
 1967 Sociology. New York: Alfred A. Knopf.
- Ross, Murray G.
 1955 Community Organization. New York: Harper and Row.
- Ryan, Brice
 1952 "Primary and Secondary Contacts in a Ceylonese Peasant
 Community." Rural Sociology 17 (December):311-321.
- Sanders, Irwin T.
 1966 The Community: An Introduction to a Social System. New
 York: Ronald Press.
- Satterlee, James L.
 1963 A Study of Attitudes Toward the Present School System
 and School Reorganization in a Rural South Dakota County.
 Brookings: South Dakota State University. Unpublished
 M.S. Dissertation.
- Selvin, Hana C., and Warren O. Hagstrom
 1963 "The Empirical Classification of Formal Groups." American
 Sociological Review 28 (June):399-411.
- Sewell, William H.
 1949 "Field Techniques in Social Psychological Study in a
 Rural Community." American Sociological Review 14
 (December):718-726.
- Sewell, William H., and Allen M. Orenstein
 1965 "Community of Residence and Occupational Choice." American
 Journal of Sociology 70 (March):551-563.

- Sjoberg, Gideon J., and Roger Nett
1968 A Methodology for Social Research. New York: Harper and Row.
- Shibutani, Tamotsu
1961 Society and Personality. Englewood Cliffs: Prentice-Hall.
- Smelzer, Neil J., and William T. Smelzer
1963 Personality and Social Systems. New York: John Wiley and Sons.
- Smith, Joel, William H. Fonn, and Gregory P. Stone
1954 "Local Intimacy in a Middle Sized City." American Journal of Sociology 60 (November):281-289.
- Smith, T. Lynn, and Paul E. Zopf
1970 Demography. Philadelphia: F. A. Davis Company.
- Steeves, Allen D.
1969 "Dissatisfactions and the Farm-Nonfarm Work Context." Social Forces 48 (December):224-232.
- Stouffer, Samuel A.
1962 Social Research to Test Ideas. Glencoe: The Free Press.
- Summers, Gene F., et al.
1969 Before Industrialization: A Rural Social System Base Study. Urbana: University of Illinois Agricultural Experiment Station. Bulletin 736.
- Taylor, Lee, and Arthur R. Jones
1964 Rural Life and Urbanized Society. New York: Oxford University Press.
- Vidich, Arthur J., and Joseph Bensman
1968 Small Town in Mass Society. Princeton: Princeton University Press.
- Walpole, Ralph E.
1968 Introduction to Statistics. London: Macmillan Company.
- Warner, W. Lloyd, and Paul S. Hunt
1941 The Social Life of a Modern Community. New York: Yale University Press.
- Warner, W. Lloyd, et al.
1949 Democracy in Jonesville. New York: Harper and Row.

Warren, Roland L.

1972 The Community in America. Chicago: Rand McNally and Company.

West, James

1945 Plainville, U.S.A. New York: Columbia University Press.

White, A. Clyde

1955 "Social Class Differences in the Uses of Leisure." American Journal of Sociology 61 (September):147-153.

Williams, Robin M.

1970 American Society. New York: Alfred A. Knopf.

Wright, Charles R., and Herbert H. Hymen

1958 "Voluntary Associations' Memberships of American Adults." American Sociological Review 23 (June):284-294.

Yankton Press and Dakotan

1962 News Item about Milbank. Yankton: Yankton Press and Dakotan. April 16.

Zetterberg, Hans L.

1963 On Theory and Verification in Sociology. Totowa, New Jersey: Bedminster Press.

Znaniecki, Florian

1934 The Method of Sociology. New York: Farrar and Rinehart.

Non-Metropolitan Area Development Schedule

Respondent _____ Interviewer _____

Address _____ Date of Interview _____

How long have you lived here? _____ What is your marital status? married _____

How many people presently reside in this household? _____ single _____

How many rooms do you have? _____ divorced _____

separated _____
widowed _____

1.) Present Members	Sex	Age	Highest grade completed	Of those children who have left here where are they living now?
Household Head				
Lady of the House				
Children				
Others (state when)				

2.)	Occupation held	For how long do you work	How long have you now for is worked there	What from here
What is yours:				
How many jobs have you held in past 10 years?				
What is your spouse's occupation if she's worked in past year?				

3.) Of those children who have left home, what do you think is their major reason for leaving? _____

4.) Do you think they would like to return if given the opportunity? _____

5.) How many times have you and your family moved in the last 10 years?

From?	To?	Major reason for move?

6.) Are you planning to move from this area in the near future? _____

7.) Why? (main factor) _____

8.) While in school did you hold any class office? _____

9.) What were they? _____

10.) Have you ever been appointed or elected to political office? _____

(If "yes" ask)

11.) What office	Location	Nature of position (elected or appointed)	Length

- 12.) Do you subscribe to any of the following publications? Readers Digest _____
 13.) Do you take a newspaper (s)? _____
 14.) Weekly _____ Daily _____ Semi-weekly _____
 15.) Name of Paper (s) _____
 16.) Where published? _____
- Readers Digest _____
 Life _____
 Rollers _____
 Halfway _____
 Look _____
 National Observer _____
 Life _____
 Dakota Farmer _____
 Lakes Fore Journal _____
 Specify others _____

- 16 A.) Do you own lakeside property on Big Stone Lake? _____
 16 B.) If the level of the lake is raised, do you expect compensation from the power company? _____

- 17.) In which of the following organizations do you and/or your family participate:
- | | Family | Spouse | Children | SSA Field Office | Local Office |
|----------------------|--------|--------|----------|------------------|--------------|
| American Legion | | | | | |
| V.F.W. | | | | | |
| 4-H Clubs | | | | | |
| Farmer's Union Co-op | | | | | |
| Woods | | | | | |
| Jaycees | | | | | |
| Gray Ladies | | | | | |
| Home Extension Club | | | | | |
| The 4-H Agency | | | | | |
| H.F.O. | | | | | |
| Farm Bureau | | | | | |
| Grange | | | | | |
| Order of Commerce | | | | | |
| Knights | | | | | |
| Scouts | | | | | |
| Elks | | | | | |
| Elsonic Order | | | | | |
| Knights of Columbus | | | | | |
| ILWU | | | | | |
| Scouts (boy or girl) | | | | | |
| Religious | | | | | |
| Other (specify) | | | | | |

- 18.) What do you and your family do as major forms of recreation?

In the home Out of the home

Parents

Children

- 19.) With which area community do you primarily associate yourselves?

Big Stone City _____ Ellipton _____ Ortonville (Minn.) _____ Other (specify) _____

- 20.) Would you say this area has: Grown _____ Lost _____ or stayed the same _____ in population in the last 10 years?

- 21.) What major factor do you think was the cause of this? _____

- 22.) Do you feel the economic conditions in this area are: Poor _____ Fair _____
 Good _____ or Excellent _____?

- 23.) Are there any members of your family eligible to work in the proposed power plant during construction phase _____, or during the operations phase _____?

- 24.) Do you think they would like to work there? _____

25.) lately, there has been much discussion and contraversey over the subjects of air and water pollution. in your opinion, do you feel:

South Dakota has a pollution problem, and if so how would you rate it?

None at all ☐ some ☐ tolerable ☐ serious ☐ or critical? ☐

Do you feel this area has a pollution problem, and if so how would you rate it?

None at all ☐ some ☐ tolerable ☐ serious ☐ or critical? ☐

26.) (ask only if respondent feels immediate area has a pollution problem)
What do you feel is the major source of pollution in this area?

Industry ☐ agriculture ☐ municipalities ☐ lake shore cottages ☐ litter. ☐

27.) Material possessions: Do you own:

yes no

Central heating system

Air conditioning (Central Window)

Water pipes into house

Indoor toilet facilities

Complete with bath and shower

Refrigerator

Home freezer

Clothes washing machine

Clothes drying machine

Automatic dishwashing machine

Television (Number of sets) (Black and white) Color

Radio (Number)

Record player

28.) Since our knowledge of this area could never approach that of a local resident, we would appreciate your help in responding to the following questions:

Are you aware of:

yes no

The proposed construction of an electric power plant in this area?

Any proposed changes to be made in the level of Big Stone Lake and present flood control operations?

Any major environmental problems in this area?

Any major community problems in this area?

The function of the Minnesota - South Dakota Boundary Waters Commission?

Any rural industrial development programs in this area?

The megawatt out-put of the proposed power plant?

The megawatt out-put of the present power plant?

The exact location of the proposed power plant?

The primary fuel to be used in the plant's operation?

29.)

What is your:

religious preference

denomination

Are you a church member?

To which church do you belong?

How far is that from here?

Do you hold a church office?

Yes no

MEM

Spouse

Children

29 A.) How long have you been a member of your present congregation or parish?

30.) Do you attend church: 4 times/mo. or more 2 times/mo. or more seldom never

2. We would like you to indicate the extent of your agreement or disagreement with each of the following statements:

A.

	Strongly Agree	Mildly Agree	Unde- cided	Mildly Disagree	Strongly Disagree	
1.	SA	MA	U	MD	SD	I feel the future outlook for the area's economy is dependent upon the Big Stone power plant
2.	SA	MA	U	MD	SD	I feel many new jobs will be created when the power plant comes
3.	SA	MA	U	MD	SD	I feel people will be more financially secure when the plant is built
4.	SA	MA	U	MD	SD	I feel much additional money will be spent in our community when the plant is built
5.	SA	MA	U	MD	SD	I feel people who have left the area to get jobs might return when the plant is built
6.	SA	MA	U	MD	SD	I feel the power plant might cause some new businesses to open
7.	SA	MA	U	MD	SD	I feel the power plant is a necessity for the economic future of this area
8.	SA	MA	U	MD	SD	I feel the power plant will favorably alter the tax structure of this area
9.	SA	MA	U	MD	SD	I feel we have needed such industry in the community for a long time
10.	SA	MA	U	MD	SD	I feel the power plant will bring most of its own employees with it

B.

1.	SA	MA	U	MD	SD	I feel the proposed power plant will damage Big Stone Lake
2.	SA	MA	U	MD	SD	I feel the power plant would adversely affect recreational facilities in this area
3.	SA	MA	U	MD	SD	I feel recreation would no longer be a major attraction after the plant's completion
4.	SA	MA	U	MD	SD	I feel air pollution would become a major problem after the plant's completion
5.	SA	MA	U	MD	SD	I feel plant operation would seriously damage the quality of the environment
6.	SA	MA	U	MD	SD	I feel power plant operations would hurt farm operations
7.	SA	MA	U	MD	SD	I feel plant location would hurt the area's conservation practices
8.	SA	MA	U	MD	SD	I feel the South Dakota side of Big Stone Lake would be the most adversely affected by the plant's location

C.

1.	SA	MA	U	MD	SD	I feel the community will have to expand to accommodate the new people when the plant is being built
2.	SA	MA	U	MD	SD	I feel we now have enough hospital facilities to serve the additional people
3.	SA	MA	U	MD	SD	I feel our police department is presently large enough to serve the additional people
4.	SA	MA	U	MD	SD	I feel our fire department is large enough to absorb the anticipated increase
5.	SA	MA	U	MD	SD	I feel our present supply of drinking water will be sufficient
6.	SA	MA	U	MD	SD	I feel our present sewage facilities are sufficient enough to service the new people
7.	SA	MA	U	MD	SD	I feel expansion of our churches will be necessary
8.	SA	MA	U	MD	SD	I feel our school facilities will have to be expanded
9.	SA	MA	U	MD	SD	I feel many additional apartments and houses will have to be built
10.	SA	MA	U	MD	SD	I feel after the construction force leaves, we will have a surplus in the above service areas
11.	SA	MA	U	MD	SD	I feel if we have a surplus of facilities, it will hurt the area

D.

1.	SA	MA	U	MD	SD	I feel most public officials are not really interested in the problems of the average man
2.	SA	MA	U	MD	SD	I feel these days a person doesn't really know whom he can count on
3.	SA	MA	U	MD	SD	I feel nowadays a person has to live pretty much for today and let tomorrow take care of itself
4.	SA	MA	U	MD	SD	I feel in spite of what some people say, the lot of the average man is getting worse, not better
5.	SA	MA	U	MD	SD	I feel it is hardly fair to bring a child into the world with the way things look for the future
6.	SA	MA	U	MD	SD	I feel there is little chance of finding real happiness in life today
7.	SA	MA	U	MD	SD	I feel most people really don't care what happens to the next fellow
8.	SA	MA	U	MD	SD	I feel it is very important to save for tomorrow
9.	SA	MA	U	MD	SD	I feel luck plays an important part in what happens to people
10.	SA	MA	U	MD	SD	I feel if one is born poor he might as well accept it, as there is no getting out

Y. We would like you to indicate the extent of your agreement or disagreement with each of the following statements:

A.

- | | | | | | | |
|----|----|----|---|----|----|--|
| 1. | SA | MA | U | MD | SD | I feel this area has a lot to offer in terms of the recreational facilities |
| 2. | SA | MA | U | MD | SD | I feel most people around here use the recreational facilities quite frequently |
| 3. | SA | MA | U | MD | SD | I feel Big Stone Lake is about the most important of the recreational facilities |
| 4. | SA | MA | U | MD | SD | I feel were it not for the recreational facilities, many people would move |
| 5. | SA | MA | U | MD | SD | I feel swimming is one of the most important forms of recreation |
| 6. | SA | MA | U | MD | SD | I feel fishing is a favorite sport of most around here |
| 7. | SA | MA | U | MD | SD | I feel picnicking and camping are important forms of recreation, especially in this area |
| 8. | SA | MA | U | MD | SD | I feel one of the major reasons I am living in this area is the availability of outdoor recreation |

B.

- | | | | | | | |
|----|----|----|---|----|----|--|
| 1. | SA | MA | U | MD | SD | I feel our local government is usually very efficient |
| 2. | SA | MA | U | MD | SD | I feel for the most part there is a scarcity of employees in the city or town government |
| 3. | SA | MA | U | MD | SD | I feel local government is progressive and responsive to change |
| 4. | SA | MA | U | MD | SD | I feel our local government is agrarian oriented |
| 5. | SA | MA | U | MD | SD | I feel our local government is overly politically oriented |
| 6. | SA | MA | U | MD | SD | I feel our local government is in tune with environmental problems |
| 7. | SA | MA | U | MD | SD | I feel only the wealthy people get elected to political office |

C.

- | | | | | | | |
|----|----|----|---|----|----|---|
| | | | | | | I feel the economy of this area is: |
| 1. | SA | MA | U | MD | SD | Highly stable |
| 2. | SA | MA | U | MD | SD | Overly oriented to the farmer |
| 3. | SA | MA | U | MD | SD | Progressive and in tune with the times |
| 4. | SA | MA | U | MD | SD | Oriented to future opportunity for this area |
| 5. | SA | MA | U | MD | SD | Geared to handle environmental problem |
| 6. | SA | MA | U | MD | SD | Providing sufficient incentive to youth to remain in the area |

7.	SA	MA	U	MD	SD	Providing sufficient employment opportunity for all who really want to work
8.	SA	MA	U	MD	SD	Giving the majority of people a favorable standard of living

C.

1.	SA	MA	U	MD	SD	I feel our hospital facilities are presently adequate for our needs
2.	SA	MA	U	MD	SD	I feel our police department is sufficiently staffed and efficient
3.	SA	MA	U	MD	SD	I feel our fire department is efficient and giving us good fire protection
4.	SA	MA	U	MD	SD	I feel our sewage facilities are adequate for our needs
5.	SA	MA	U	MD	SD	I feel the area communications systems are giving us good service
6.	SA	MA	U	MD	SD	I feel the local stores and consumer services in the community are meeting the needs of the people adequately
7.	SA	MA	U	MD	SD	I feel most of what anyone could need can be bought in the downtown stores

E.

1.	SA	MA	U	MD	SD	I feel our churches are sufficient to serve all religious denominations
2.	SA	MA	U	MD	SD	I feel we have enough ministers to adequately staff the churches
3.	SA	MA	U	MD	SD	I feel people in this area are generally very religious
4.	SA	MA	U	MD	SD	I feel most people in the area attend church regularly
5.	SA	MA	U	MD	SD	I feel our churches are being efficiently managed
6.	SA	MA	U	MD	SD	I feel the religious needs of the people in the area are being met adequately

F.

1.	SA	MA	U	MD	SD	I feel we have enough schools and educational services in the area to meet the need of the children
2.	SA	MA	U	MD	SD	I feel the teachers in the schools are well trained and competent
3.	SA	MA	U	MD	SD	I feel our children are receiving a quality education
4.	SA	MA	U	MD	SD	I feel our school board is progressive and well aware of future needs
5.	SA	MA	U	MD	SD	I feel our educational services receive adequate community support

G.

1.	SA	MA	U	MD	SD	I feel we at present have a potentially serious water pollution problem
2.	SA	MA	U	MD	SD	I feel air pollution is a problem in this area

3.	SA	MA	U	MD	SD	I feel most of our pollution is the result of agricultural operations
4.	SA	MA	U	MD	SD	I feel conservation practices help to control pollution
5.	SA	MA	U	MD	SD	I feel an increase in the adoption of conservation practices by farmers would greatly help reduce pollution
6.	SA	MA	U	MD	SD	I feel thermal pollution is a definite factor which might reduce the quality of the environment
7.	SA	MA	U	MD	SD	I feel industrial pollution has long threatened the quality of the environment

H.

1.	SA	MA	U	MD	SD	I feel most people in this area are very friendly
2.	SA	MA	U	MD	SD	I feel our people care about their neighbors
3.	SA	MA	U	MD	SD	I feel our people can always be counted on
4.	SA	MA	U	MD	SD	I feel people here will always help a friend in need
5.	SA	MA	U	MD	SD	I feel people here are honest and straight forward

I.

1.	SA	MA	U	MD	SD	I feel long term progress is more important than immediate benefit
2.	SA	MA	U	MD	SD	I feel we have too many youth programs
3.	SA	MA	U	MD	SD	I feel schools are as good as they are in most communities
4.	SA	MA	U	MD	SD	I feel we have a sufficient amount of social services
5.	SA	MA	U	MD	SD	I feel the spiritual needs are adequately met by the churches
6.	SA	MA	U	MD	SD	I feel there are sufficient recreational facilities
7.	SA	MA	U	MD	SD	I feel adult education programs should be an essential part of the local school programs
8.	SA	MA	U	MD	SD	I feel the individual has a responsibility to his neighbor
9.	SA	MA	U	MD	SD	I feel the church members are better citizens
10.	SA	MA	U	MD	SD	I feel we have a good Chamber of Commerce
11.	SA	MA	U	MD	SD	I feel we have good city government
12.	SA	MA	U	MD	SD	I feel the main problem we face is high taxes
13.	SA	MA	U	MD	SD	I feel good citizens help minority groups with their problems

RECREATION SCALE

TYPE:	WHERE			PARTICIPATION				WHY			PERCEIVED EFFECT OF RURAL INDUSTRIAL DEVELOPMENT ON RECREATION FACILITIES		
	IMMEDIATE AREA	LESS THAN 50 mi.	MORE THAN 50 mi.	NEVER	SOME- TIME	FRE- QUENT- LY	REG- ULAR- LY	EN- JOY- MENT	CON- VEN- IENT	ECON- OMIC- AL	CON- AG- ING	NO EFFECT	BEN- EFI- CIAL
SWIMMING													
BOATING													
FISHING													
ICE FISHING													
WATER SKIING													
ICE SKATING													
HUNTING													
CAMPING													
PICNICS													
GOLFING													
TENNIS													
BICYCLING													

DO YOU OWN:	YES	NO	TYPE:	TRAILER	TENT	CAMPER	PICK-UP	CAMPER: OTHER
CAMPING TRAILER								
TENT								
STATIC WAGON USED FOR CAMPING								
BUS CAMPER								

LIST THE CAMPING EQUIPMENT YOU OWN: (stove, lanterns, etc.) _____

DO YOU OWN YOUR OWN HOME? _____ DO YOU RENT YOUR HOME? _____

INCOME: (Please circle one letter)

- a. less than \$2,500 d. between \$5,000 and \$6,499 g. between \$10,000 and \$11,999
 b. between \$2,500 and \$3,499 e. between \$6,500 and \$7,999 h. between \$12,000 and \$14,999
 c. between \$3,500 and \$4,999 f. between \$8,000 and \$9,999 i. over \$15,000/annum

TABLE I

ATTITUDE TOWARD COMMUNITY SERVICE AND EMPLOYMENT
IN THE STONE LANE AREA

APPENDIX II

Community Service and Employment Status	Number of Respondents
AVAILABLE FOR SERVICE - 11-63	
Less Than 20%	5
25 - 30	25
31 - 35	50
36 - 40	50
41 - 45	30
46 - 50	5
Total	165

Three incomplete

STONE LANE AREA COMMUNITY SERVICE AND EMPLOYMENT
ATTITUDE

TABLE 1

ATTITUDE TOWARD COMMUNITY SERVICES AND EXPANSION

IN BIG STONE LAKE AREA

Community Services and Expansion Scale (Possible Range of Values = 11-55)	Number of Respondents	
Less than 25**	0	
25 - 30	21	
31 - 36	58	
37 - 42	64	
43 - 48	30	
49 - 54	3	
Total	176*	

*Three incomplete

**Low scores indicate positive attitudes toward community services.

TABLE 2

TOTAL POSITIVE AND NEGATIVE RESPONSES TO QUESTIONS
COMPRISING KNOWLEDGE SCALE

Question Items	Yes	No	Total
Proposed construction of an electric power plant?	175	3	178
Any changes in level of Big Stone Lake?	108	70	178
Any environmental problems in this area?	63	115	178
Any community problems in this area?	43	135	178
Function of Minnesota-South Dakota Boundary Waters Committee:	90	88	178
Rural industrial development programs?	59	128	178
Megawatt out-put of proposed power plant?	52	126	178
Megawatt out-put of present power plant?	36	142	178
Location of proposed power plant?	146	32	178
Primary fuel to be used in operation?	137	41	178

Scale Values + 190 - 88

TABLE 3

NUMBER OF RESPONDENTS PARTICIPATING IN AREA ORGANIZATIONS

Organizations	Number of Respondents
1. American Legion	32
2. V.F.W.	25
3. 4-H Clubs	8
4. Farmer's Union Co-op	25
5. Jaycees	7
6. Home Extension Clubs	3
7. N.F.O.	19
8. Farm Bureau	2
9. Grange	1
10. Chamber of Commerce	16
11. Kiwanis	8
12. Masonic Order	11
13. Knights of Columbus	10
14. Elks	3
15. Scouts (Boy or Girl)	3
16. Religious	59
17. Others	17

TABLE 4. EDUCATION LEVEL OF RESPONDENTS BY COMMUNITY OF RESIDENCE

Education Level	Big Stone, City, S.D. (N=61) (%)	Ortonville, Minn. (N=47) (%)	Milbank, S.D. (N=43) (%)	Rural (N=28) (%)	Total (N=179) (%)
College					
Post Graduate		1 (2.0%)	1 (2.3%)		2 (1.1%)
Graduate	9 (14.8%)	8 (17.0%)	4 (9.3%)	2 (7.1%)	23 (12.8%)
Some College, but not graduate	4 (6.5%)	3 (6.4%)	1 (2.3%)		8 (4.5%)
High School					
Graduate	16 (26.2%)	12 (25.3%)	14 (32.5%)	11 (39.4%)	53 (29.6%)
Some High School	25 (41.0%)	20 (42.9%)	17 (39.6%)	13 (46.4%)	75 (41.9%)
Grade School					
8 Grades or less	7 (11.5%)	3 (6.4%)	6 (14.0%)	2 (7.1%)	18 (10.1%)
TOTAL	61 (100.0%)	47 (100.0%)	43 (100.0%)	28 (100.0%)	179 (100.0%)

TABLE 5

AVERAGE AGES OF RESPONDENTS BY
COMMUNITY OF RESIDENCE

Respondents	Milbank	Big Stone City	Ortonville	Other	Average
Head of Household	50.1	54.7	52.8	56.4	53.5
Lady of House	41.2	43.4	41.5	45.5	42.9
Children	12.3	14.7	15.2	16.2	14.6
Other				72.5	72.5

TABLE 6

DISTRIBUTION OF RESPONDENTS
BY COMMUNITY OF RESIDENCE

Community of Residence	Number of Respondents
Big Stone City	61
Ortonville	47
Milbank	43
Rural	28
TOTAL	179

TABLE 7

AVERAGE LENGTH OF RESIDENCE OF RESPONDENTS
BY COMMUNITY OF RESIDENCE

Community	Years
Urban and Town	
Milbank, South Dakota	20.0
Big Stone City, South Dakota	24.8
Ortonville, Minnesota	21.0
Rural Open Country	
Browns Valley, Minnesota	27.0
Corona, South Dakota	25.0
Wilmot, South Dakota	40.0

TABLE 8

RELIGIOUS AFFILIATION OF BIG STONE LAKE
AREA RESIDENTS BY COMMUNITY OF RESIDENCE

Community of Residence	Protestant	Catholic	Total
Milbank	49	14	63
Big Stone City	26	8	34
Ortonville	33	18	51
Other	19	4	23
TOTAL	127	44	171*

*8 with no affiliation